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ABSTRACT

Results of a study of the efficacy of foreign language instruction at the elementary school level are presented. The study provides new information permitting comparison of three program types--Foreign Language in the Elementary School (FLES), partial immersion, and immersion--currently used in schools in the United States. The results are based on achievement in listening, speaking, reading, and writing in French and Spanish as measured by the Modern Language Association (MLA) Cooperative Foreign Language Proficiency Tests. The following research questions are addressed in the study: (1) How do different foreign language program types affect student performance on a standardized language achievement test in terms of total time or intensity of instruction and use or non-use of the foreign language to teach core curriculum subjects? (2) How does variation among schools within a given language program affect performance on the MLA test in terms of (a) articulation or continuity at the individual school level and within the school system, (b) socioeconomic status of students, and (c) number of years of program operation at the individual school level? (3) What is the correlation between self-assessment of language skills and performance on the MLA test? Overall, the results show immersion programs to result in student test performance significantly higher for all skills than FLES programs, and partial immersion programs to result in test performance at a level between total immersion and FLES programs. Policy implications based on the variety of interactions found are discussed. (MSE)

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COMPARATIVE EVALUATION OF ELEMENTARY SCHOOL FOREIGN LANGUAGE PROGRAMS

FINAL REPORT

Tracy C. Gray, Principal Investigator
Nancy C. Rhodes

Center for Applied Linguistics

Russell N. Campbell
Marguerite Ann Snow

University of California,
Los Angeles

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> What is certain is that the deteriorating language study programs of this country are presenting a major hazard to our national security....The Federal government is going to have to provide leadership in helping to solve this problem.
>
> In our human intelligence needs, it is not just an ability to understand the language that is important, but rather there must be the ability to converse with total fluency [and] to understand the nuances of conversation (1981).
>
> Admiral Bobby R. Inman, Deputy Director
> Central Intelligence Agency

Foreign language instruction in the elementary schools has traditionally been treated like the stepchild of the core curriculum: It has been embraced by some as a key link and ignored by others as extraneous in the development of basic skills. With the passage of the National Defense Education Act (NDEA) of 1958, the importance of foreign languages became the focal point for educational reform. Federal funds were allocated for diverse purposes including language programs in the elementary schools (FLES) and training institutes at the post-secondary level. Unfortunately, as the federal funds began to wane, so did enthusiasm for foreign language learning. Declining enrollments coupled with continual financial problems throughout the educational system dissipated most of the gains made in the sixties.

Two decades later, the importance of foreign language instruction has emerged in the public policy arena once again. The much discussed report of the President's Commission on Foreign Languages and International Studies

(1979) underscored the need for foreign language studies. This prestigious commission specifically recommended that such study begin in the elementary school and continue throughout the students' educational experience.

Subsequent commission reports, while focusing on the general decline in the quality of our nation's schools, have also addressed the lacunae in foreign language study. "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war," states the National Commission on Excellence in Education (1983). In a series of recommendations, the commission notes that "achieving proficiency in a foreign language ordinarily requires from 4 to 6 years of study and should, therefore, be started in the elementary grades." Similarly, the Twentieth Century Fund's Task Force on Federal Elementary and Secondary Education Policy (1983) notes that "our nation's public schools are in trouble and recommends that "every American public school student [should] have the opportunity to acquire proficiency in a second language."

These views are reiterated in the recent study released by the College Board (1983) which emphasizes the importance of expanding the concept of basic skills to include foreign language instruction for <u>all</u> students. More specifically, the report states that "knowledge of a foreign language helps students prepare for careers in commerce, international relations, law, science, and the arts." Furthermore, the report emphasizes that the development and maintenance of foreign language skills is a valuable national resource.

Given this growing resurgence of interest in foreign language instruction, several questions need to be addressed by educators and policy makers. What educational alternatives are available in the U.S. schools? What types of

programs are offered to teach foreign languages? How effective are these programs at meeting their stated goals?

One of the most comprehensive efforts to detail the variety of foreign language programs around the country was conducted at the Center for Applied Linguistics (CAL) for the U.S. Department of Education (Rhodes, Tucker & Clark, 1981). Using a survey technique, a total of 1,237 schools in eight states were sampled to determine the degree and extent of early foreign language instruction in the U.S. Of the 453 schools that responded, approximately one out of five (18 percent) reported that they teach a foreign language. A sample of 18 schools were classified as innovative and five distinct approaches were identified: total immersion, partial immersion, curriculum integrated foreign language instruction, revitalized foreign language in the elementary school (FLES), and foreign language experience.

The CAL survey resulted in the compilation of a practical guide to the teaching of foreign languages in the elementary schools (Rhodes & Schreibstein, 1983). The guide discusses in detail the current programs, the advantages of early foreign language study, and the logistics of establishing such programs at the local level.

Clearly, the contributions of the aforementioned studies are noteworthy in that they provide current descriptive information on the state of the art in early foreign language teaching. Until the present study, however, there continued to be a paucity of empirical information on the merits and limitations of the current approaches. The survey and follow-up site visits revealed that few schools, if any, had systematic evaluations of their students' foreign language proficiency. Many school principals, teachers, and parents expressed a keen

interest in having such evaluations conducted in a systematic fashion.

This research effort focuses on the efficacy of foreign language instruction at the elementary school level. The report provides, heretofore, unavailable information that permits a comparison of three foreign language program types currently found in fifteen schools in the United States. These comparisons are based on measured achievement in listening, speaking, reading, and writing in French and Spanish. It is hoped that this study will provide valuable information to assist educators in their efforts to successfully fulfill the recommendations offered by the various commissions on education.

The following principle research questions were addressed in this study:

1) How do different foreign language programs (FLES, partial immersion, immersion) affect student performance on a standardized language achievement test (Modern Language Association Test)?

   More specifically, in terms of:

   (a) Total time or intensity of foreign language instruction.

   (b) Use or non-use of the foreign language to teach core curriculum subjects (e.g., math, social studies, etc.).

2) How does variation among schools (within a given language program) affect student performance on the MLA Test?

   More specifically, in terms of:

   (a) Articulation or continuity at the individual school level and within the school system.

   (b) Socioeconomic status of participating students.

   (c) Total number of years the program has been in operation at the individual school level.

3) What is the correlation between self-assessment of language skills and student performance on the MLA test?

In the conclusion of this report, the implications of the research findings will be discussed within the framework of the current state of the art of foreign language instruction. This discussion will include an examination of realistic goals for these language programs in terms of the development of the four language skill areas. Finally, it will address the public policy implications for foreign language instruction in the United States.

METHODOLOGY

This section will detail the methodological procedure undertaken to conduct this research effort. It consists of five subsections:

(1) Definition and Historical Overview of Foreign Language Programs

(2) Subjects -- Student Sample and Selection Process

(3) Assessment Instruments and Survey Forms

(4) Testing Procedure and Data Collection

(5) Data Analysis

DEFINITION AND HISTORICAL OVERVIEW OF FOREIGN LANGUAGE PROGRAMS

FLES (Foreign Language in the Elementary School) Programs. The concept of FLES was introduced into the United States public schools during the 1950's. A 1953 conference of the Modern Language Association (MLA) met to "...provide informed answers to the questions most frequently asked about this rapidly growing movement." Eriksson (1964) and Andersson (1969), both proponents of FLES, presented arguments similar to those being offered today for foreign language educational opportunities for American school children.

FLES programs were seen as an alternative to inefficient foreign language methods, such as grammar translation, that prevailed in American schools at that time. Eriksson described the goals of a prototypical FLES program:

> Although the primary objective of a foreign-language program in the elementary school is to develop audio-lingual mastery of a minimum vocabulary and some of the basic speech patterns, we believe that sixth grade pupils are ready for a carefully controlled amount of reading and writing. (p. 46)

In reviewing the literature, five characteristics seem essential to an

accurate description of the earliest FLES model:

1) Inception - FLES should begin in the earliest grade possible, in kindergarten or first grade at the latest.

2) Continuity - A FLES program should be continued throughout elementary and secondary grades.

3) Time provisions - Most FLES lessons are 15-20 minutes long and occur from two to five times a week.

4) Teachers - The typical FLES program employs a foreign language teacher.

5) Underlying methodological assumption - Language teaching is the process of habit formation.

More recently, revitalized FLES programs place greater emphasis on the development of oral language skills than in the past, and often include a cultural awareness component in the curriculum (Met, et al., 1983). Furthermore, the actual time spent using the foreign language has been expanded to classroom sessions of 20-45 minutes per lesson. Having learned from past experience, many of today's FLES programs are setting more realistic goals about what can be accomplished through this approach.

For the purpose of this study, FLES schools are defined as those that provide foreign language instruction for approximately 2 to 5 hours a week. Information collected for this study during the 5 site visits, revealed that generally the language learning goals of these FLES schools are to: (1) attain a degree of listening and speaking skills (the degree varies from school to school) on topics suitable for children; (2) acquire cultural awareness; and (3) acquire a limited degree of reading and writing skills, although these

skills are not emphasized as much as listening and speaking.

Immersion Programs. The emergence of immersion foreign language programs can be traced to a group of parents in an English-speaking suburb of Montreal, Canada. These parents had anticipated the academic and social advantages that would accrue to their children given an opportunity to acquire fluency in French. They studied alternative approaches to foreign language education and determined that the existing school programs did not set high enough goals of language proficiency. What they wanted for their children was a level of competency that had rarely, if ever, been achieved in the school context.

From discussions with a group of scholars at McGill University, a fundamental question emerged: What would be the consequences of teaching English-speaking children as if they were French-speaking children (i.e., in a classroom where only French was spoken)?

Several other questions were of interest to these parents, school officials, and McGill scholars:

1. Would the children acquire French? If so, to what level of proficiency in speaking, reading, writing, and listening?
2. Would immersion retard the children's development in English?
3. How well would the children perform scholastically?
4. How would the experience affect the children's attitudes toward Francophones? How would they feel about themselves and the Anglophone society?

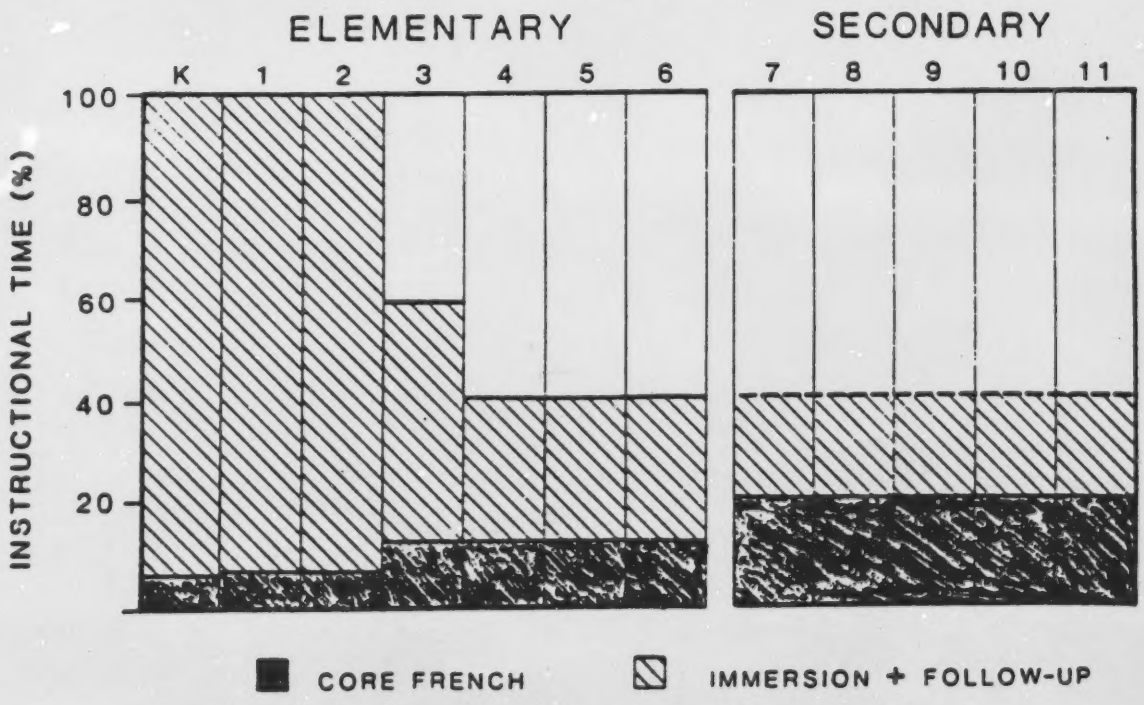
To examine these important questions, an experimental French immersion kindergarten class was inaugurated in 1965. The children received all of their instruction during kindergarten and first and second grade from teachers who

used only French. During the third grade, another teacher taught the children language arts (reading and writing) in English. The remainder of the school day was taught in French. During grades four through six, the amount of instruction in English was increased until approximately 50% of the curriculum was taught in French and the remainder in English. Genesee (in press) represents the distribution of instructional time in each language in grades K through 6 in the French immersion program (See Figure 1).

FIGURE 1

Summary of an Early Total French Immersion Program

(Note: Core French consists of language arts instruction of 30 to 60 minutes daily.)



From: Genesee, F. (in press). Historical and Theoretical Foundations of Immersion Education. In Studies on Immersion Education: A Collection for United States Educators. California Department of Education: Office of Bilingual Education.

Two points should be made about Figure 1. One, the instructional time in French should not be interpreted as time spent in traditional foreign language instruction. Rather, it is the percentage of time that the standard school curriculum is taught in a foreign language. The foreign language is the medium of instruction. The second point is that material taught to the children in French was not repeated, that is, not translated into English.

Based on the Canadian model, the first immersion program in the United States was established in 1971, in Culver City, California. Variations in the model included Spanish as the target language and introduction of English language arts in second grade (not third grade as in Canada). The results of immersion education in both the Canadian and American contexts are consistently positive (Lambert & Tucker, 1972; Swain, 1979; San Diego City Schools, 1980; Campbell, in press).

The studies on immersion indicate that children enrolled in these programs make considerable progress in their first language development. Moreover, they perform at a level equal to or better than their monolingual counterparts on standardized tests of academic skills. Lastly, the students report generally positive attitudes towards foreign language speakers and towards themselves as bilinguals (Tucker, 1976; Campbell & Galvan, 1981; Swain, 1979).

For the purpose of this study, immersion schools are defined as those which use the foreign language to teach 50 - 100% of the core curriculum subjects (e.g., math, social studies, etc.). Students begin in kindergarten or first grade where all the instruction is given in the foreign language. Gradually, the amount of classroom time spent in the foreign language is decreased as English is increased in grades 2-6. By grade 6, many of the schools offer a total of

50% of instruction in English and 50% in the foreign language.

The goal of the immersion schools is to ensure that students master the core curriculum as well acquire a functional fluency in the foreign language. This means that students should be able to communicate on topics appropriate to their age almost as well as their counterparts in French- or Spanish-speaking countries.

To summarize, the most important distinctions found in this study between immersion and FLES are that: (1) In immersion, over 50% of the core curriculum of the entire elementary school day is taught in the foreign language. In contrast, in FLES programs, only 10 to 15% of the school curriculum is devoted to foreign language study and typically none of the standard school curriculum is taught in the foreign language. (2) In immersion programs, the foreign language is the medium of instruction. In contrast, in FLES programs the foreign language is only taught as a subject during the school day, with the focus on the language itself.

Partial Immersion Programs. There are foreign language programs that were included in this study that do not fit either of the models described above. On close examination, it becomes evident that these programs share features of both immersion and FLES. For example, a substantial percentage of the total school curriculum is taught in the foreign language, similar to that of an immersion program. On the other hand, characteristic of a FLES program, a portion of the school day is devoted to formal language instruction. For the purposes of this study, these programs will be called partial immersion. In these partial immersion schools, it is typical to find that one to three core subjects is taught in the foreign language.

In addition, it should be noted that the definition of partial immersion in this study has been broadened to include schools that teach foreign language *per se* for at least 70 minutes a day. Thus, partial immersion students participated in a wide range of programs. At one extreme are those students who are in immersion for half a day (50% of their classes are taught in the foreign language). In between are those students who have two immersion classes (e.g., social studies and health or science and math) as well as 70 minutes of foreign language a day. At the other extreme are those that have only the language class for 70 minutes a day (in 30- and 40-minute blocks).

Figure 2 summarizes the three important features which distinguish FLES, partial immersion, and immersion:

(1) Total time or intensity of foreign language instruction

(2) Use or non-use of the foreign language to teach core curriculum subjects

(3) Formal instruction of the foreign language, i.e., study of the foreign language itself

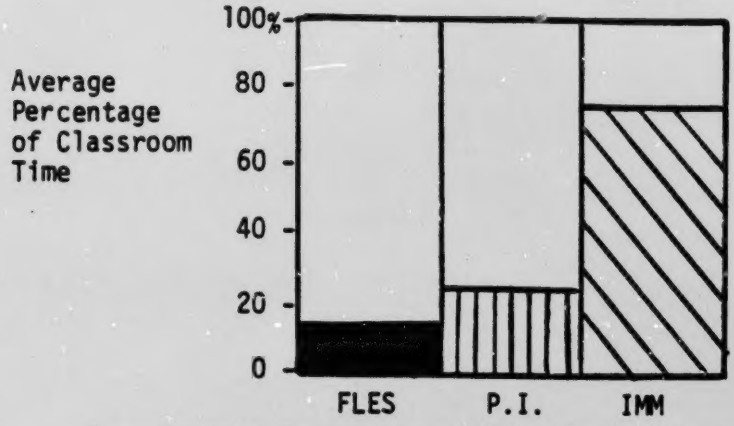
SUBJECTS - STUDENT SAMPLE AND SELECTION PROCESS

Student Sample. This study sampled a total of 382 elementary school students who had studied French or Spanish for a minimum of four years and a maximum of seven years. The students were selected from 15 different schools throughout the United States that teach a foreign language using immersion, partial immersion, or FLES methodologies. One of the selection criteria for the program sites was institutional commitment for at least 5 years.

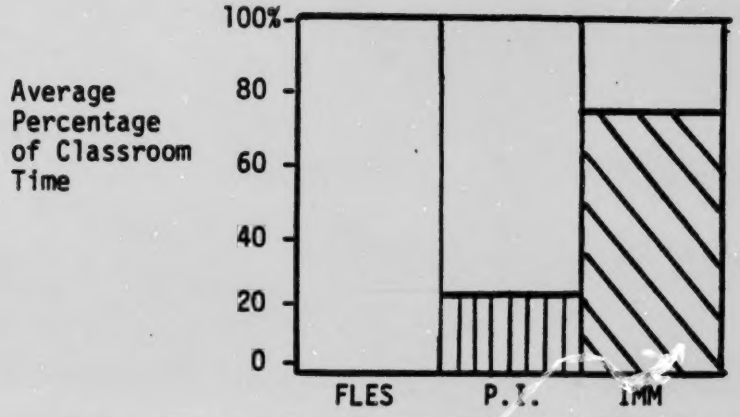
The schools represented a wide geographical distribution: eight were located in the Midwest, six in the West, and one in the East. The schools were located

FIGURE 2

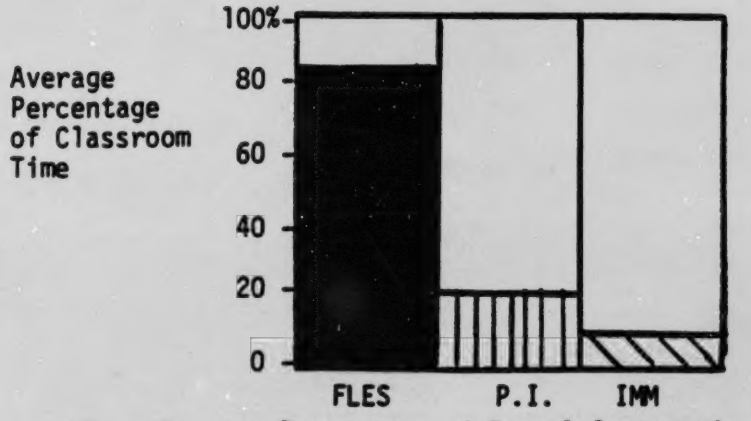
SUMMARY OF THREE DISTINGUISHING PROGRAMMATIC FEATURES



A. Average Percentage of Time Spent in Foreign Language



B. Average Percentage of Use of Foreign Language to Teach Core Curriculum Subjects



C. Average Percentage of Formal Instruction of the Foreign Language

KEY TO FIGURES:

in urban, rural, and suburban school districts. Twelve of the schools were public and three were privately funded. Ten of the fifteen schools had at least 40% minority students who participated in the foreign language program. The socioeconomic status of the schools ranged from lower to upper class.

More specifically, the sample included students who had studied French for 4-6 years and students who had studied Spanish for 5-7 years. There were a total of of 165 males and 217 females across the three language programs. The French students ranged in age from 9-15 years, and were enrolled in grades 4-8. In the Spanish programs, the students ranged in age from 10-14, and were in grades 5-7 (See Appendix A).

There was a total of 179 immersion students (33 French, 146 Spanish), 98 partial immersion students (Spanish only), and 105 FLES students (83 French, 22 Spanish).

PARTICIPANTS IN STUDY

	Immersion	Partial Immersion	FLES
FRENCH	33	0	83
SPANISH	146	98	22
TOTAL	179	98	105

Student Selection Process. The criteria for school selection were: (1) schools that had students who had studied foreign language for four or more years for French and five or more years for Spanish, and (2) schools that agreed to participate in the study (See Appendices B & C).

It should be noted that the 179 immersion students included in this research represent the most comprehensive sample of students who have been

involved in American immersion programs for at least four years. They were selected from the four school districts that started immersion programs in 1977 or earlier (and thus had students who had studied foreign language for five or more years).

The 98 partial immersion students included all the students in the United States who have been involved in some type of partial immersion for at least five years. All of these students are drawn from the same school district. This is due to the fact that no other district in the country has students who have been involved in partial immersion for five or more years (Rhodes, et al., 1981).

The 105 FLES students were selected from four school districts. Three of the schools were private and one was public. These schools were drawn from a larger pool of FLES programs compiled by national surveys conducted by the Center for Applied Linguistics (1981) and the Association to Cure Monolingualism (1982). Although there are thousands of schools that have some type of FLES program, this study sampled a limited number that offer a complete sequence of foreign language instruction from grades K-6 (thus having students who have studied for four or more years). The FLES schools were not randomly selected because there was no listing of all FLES programs from which to select the school samples.

ASSESSMENT INSTRUMENTS AND SURVEY FORMS

Foreign Language Proficiency Tests. The French and Spanish versions of the Modern Language Association (MLA) Cooperative Test were administered to the subjects to assess proficiency in listening, speaking, reading, and writing. The MLA Test was developed in 1963 for use in secondary schools and

universities. It was selected because it is the only available standardized foreign language assessment instrument that tests the four language skills. Given the fact that this study focused on language learning in the elementary schools, the question arose as to its appropriateness for elementary school children.

Prior to the administration of the MLA test for this research effort, a pilot study was conducted in April 1982 with fifth graders who had been studying in an immersion program for five years. This study sought to verify that the test was, in fact, appropriate for the younger age group. It was important to determine if the elementary schoolers could indeed understand the directions on the test and could perform the required tasks. The results from this pilot study indicated that this test could be used for the younger students, for they experienced little trouble with the mechanics of the test (Gray & Campbell, 1982).

A second question arose as to the appropriateness of the MLA test for high school students studying foreign languages today. This was an issue because the present study sought to use the original normative data for comparative purposes with elementary students. The original normative data were collected from a study of over 20,000 students enrolled in 400 public, private, and parochial schools and 100 colleges throughout the United States. To determine the generalizability of the 1963 normative scores, data were collected in 1982 from high school students in two states. These results showed that students currently studying foreign languages appeared to have comparable scores on the MLA test. This finding permitted the use of the 1963 norms for the current study.

The MLA test consists of four subtests. The first subtest assesses listening skills via 45 questions on a cassette tape. The students listen to questions and select the correct answer, either from pictures or short phrases printed in the test booklet. The speaking subtest includes word repetitions, oral reading, and story telling. The students' oral language responses are recorded and analyzed by native speakers of the foreign language. The reading subtest contains 50 multiple-choice questions based on short passages or fill-in-the-blank sentences. The writing subtest includes 100 items which require the student to fill in verb tenses, make grammatical corrections, and write a short dialogue. Table 1 below details the maximum scores possible by the four subtests on the MLA Test.

Table 1

MAXIMUM POSSIBLE RAW SCORES BY SUBTESTS

Subtest	Maximum Possible Raw Score
Listening	45
Speaking	82
Reading	50
Writing	100

Protocol Data Sheet. A protocol data sheet (See Appendix D), was developed to collect ethnographic type information from teachers and administrators at the individual schools. The following information was gathered from each of the schools which participated in the study: (1) type of program; (2) year the program began; (3) person or organization that initiated the program; (4) student selection criteria; (5) reason the target language was selected; (6) ethnic composition of school; (7) number of native speakers in the program; (8) program methodology; (9) type of curriculum; (10) order of importance ascribed by teacher to reading, writing, listening, and speaking skills, and cross-cultural understanding; (11) number of hours per day of content instruction in the foreign language; (12) per pupil costs of running the program; (13) follow-up programs available after the elementary school; (14) number of teachers in the program; (15) number of native speaking teachers and their country of origin; and (16) amount of staff continuity in program.

This information provided the basis for the detailed descriptions of the specific characteristics of each school visited during the study. In addition, these findings were used to interpret student performance on the MLA Test.

Student Information and Self-Assessment Form. A student form was developed to collect information on each subject with regard to: age, grade, place of birth, number of years spent studying the foreign language, and reasons for studying the foreign language. In addition, all students were asked to complete a self-assessment form wherein they evaluated their language skills in speaking, understanding, reading, and writing. This information was used to examine the relationship between students' self-rating and objective test scores (See Appendix E).

TESTING PROCEDURE AND DATA COLLECTION

Test Administration. The MLA Test was administered in April and May of 1983 at ten of the school sites by project staff and at five of the school sites by classroom teachers. All participating students were asked to complete the listening, reading, and writing sections of the test. In two schools, the teachers decided that portions of the writing section were far beyond the capabilities of the students, so a total of 42 students were not required to complete the written portion. A sub-sample of approximately 13% of the students was randomly selected to be tested on the speaking section.

The first three sections, listening, reading, and writing, required 25-35 minutes each and were administered to an entire class at one sitting. The students were usually given a short break between each section. The speaking section, with instructions on a cassette tape and accompanying pictures in the test booklet, required 15 minutes. It was administered individually in a separate room by project staff.

As with the pilot group, it was found that most students in grades five and above had little difficulty understanding the format and directions on the test. However, it should be noted that some of the French students in grade four had difficulty understanding the directions, the format, and even the basic concept of the listening portion of the test. (It was difficult for some of them to find the answer in their test booklet on the listening subtest and then mark the answer on a computerized answer sheet.) The teachers informed us that the fourth graders had had little practice in taking standarized tests and were not yet "test-wise." Many of them appeared anxious and some were visibly upset by the test. Overall, the majority of the students

were able to understand and perform adequately on the mechanics of the test.

Collection of Ethnographic Information. At the completion of the testing session, which took approximately one day at each school, project staff spent an additional day at the school collecting detailed information about the program. This information was gathered by discussions with teachers, students, and administrators. The protocol data sheet was used as a guideline for compiling this information. The data collected were obtained to provide background information about the schools and the students to assist in the analysis of the test results.

DATA ANALYSIS

The MLA Tests were scored manually and the data were entered into an IBM PC by CAL staff and consultants. The results from the speaking subtests were evaluated by fluent speakers of French and Spanish both of whom have had extensive training in linguistics. Computer analysis of the database was conducted by a statistical consultant on the main frame computer at Georgetown University. The details of the statistical analyses conducted in this study are included in the Results chapter of this final report.

RESULTS AND DISCUSSION

This chapter details the results from the MLA test and the student self-assessment survey. For the purpose of clarity, the French and Spanish results will be discussed separately. It is important to note, that the MLA test has the same format for the French and Spanish versions. The tests, however, were not developed for comparative purposes and any such comparative inferences would not be considered appropriate or valid.

The results of student performance on the MLA test will be presented for each of the research questions addressed in the study. These results are reported in terms of mean raw scores achieved on the four subtests (Listening, Speaking, Reading, and Writing). In some instances, the percentile rankings will be included to illustrate how the elementary school students' performance compared with that of the high school students who completed the test in 1963 (the original norming group).

FRENCH LANGUAGE PROGRAMS

Results from the Modern Language Association Test

1. How does participation in one of two French language programs affect student performance on the MLA Test?

In order to address this question, the mean raw scores from the four subtests for each of the five French schools are presented in Table 2. It is evident from the data that there are differences in the scores between programs (i.e., FLES and immersion), and also within programs (i.e., at the school level). To determine if these differences were statistically significant at the school level, a nested analysis of variance was performed

TABLE 2
SUBTEST MEAN RAW SCORES BY SCHOOL FOR
FRENCH PROGRAMS

LISTENING

	SCHOOL*	NUMBER OF STUDENTS	MEAN	S.D.	
	FF-1	16	14.25	10.32	
FLES	FF-2	7	9.29	1.49	FLES
	FF-3	60	12.15	6.84	
IMM	FI-1	17	25.71	7.20	IMM
	FI-2	16	39.63	2.53	

SPEAKING

	SCHOOL	NUMBER OF STUDENTS	MEAN	S.D.	
	FF-1	3	28.00	17.78	
FLES	FF-2	3	27.33	7.57	FLES
	FF-3	5	35.60	11.80	
IMM	FF-1	5	64.00	4.74	IMM
	FF-2	6	69.67	6.31	

READING

	SCHOOL	NUMBER OF STUDENTS	MEAN	S.D.	
	FF-1	16	17.31	9.84	
FLES	FF-2	7	13.71	2.93	FLES
	FF-3	60	14.75	7.28	
IMM	FI-1	17	26.47	7.42	IMM
	FI-2	16	44.94	2.08	

WRITING

	SCHOOL	NUMBER OF STUDENTS	MEAN	S.D.	
	FF-1	16	13.88	19.04	
FLES	FF-2	7	7.43	2.30	FLES
	FF-3	60	9.45	13.82	
IMM	FI-1	17	11.47	9.61	IMM
	FI-2	16	56.75	12.77	

*School Code: To ensure confidentiality of participating schools, the following code is used througout the report: The first letter refers to language (F=French). The second letter refers to program type (F=FLES, I=Immersion). The subsequent number refers to a school within a particular program.

with program and school within program as the two factors. In addition, an analysis of variance was performed which included sex, grade, and other cross terms. The results of this analysis revealed that there were not confounding factors in this study. Both factors proved to be significant sources of variation at the .05 level.

How does this finding affect the interpretation of the data? It means that some inferences drawn about differences in student performance attributable to participation in a specific foreign language program need to be considered within the context of differences which exist at the school level. For example, on the listening subtest, the mean raw scores for FLES and immersion schools ranged from 9.29 to 14.25 and 25.71 to 39.63 respectively. In this case, the differences were significant between the programs, but also within the five schools. This is also the case for the writing subtest, where the distribution of scores is significant both at the program and school levels.

An examination of the mean raw scores in Table 3 reveals a clear pattern in overall student performance on the four subtests: Students in the French immersion programs outperformed their FLES peers on all four language tests. This difference is particularly evident in the listening, speaking and reading sections of the test.

More specifically, Figure 3 presents a graphic display of the mean raw scores on the four subtests by program. Several test results are of particular interest. First, the differences between the immersion and FLES programs on all four subtests were highly significant. The immersion students outperformed the FLES students by more than two to one in terms of mean raw scores attained on each of the subtests. For example, the mean raw scores on the speaking test

for the French FLES and immersion students were 31.27 and 67.09 respectively. This difference was found to be highly significant at the .05 level using a Scheffe test.

The comparative results from the reading test were equally disparate, with a significant difference of 20.26 points between the FLES and immersion programs (mean scores of 15.16 and 35.42 respectively). This pattern is repeated on the listening subtest; FLES students had a mean score of 12.31, compared with immersion students who obtained a mean score of 32.45. Once again the difference between the mean raw scores from the two programs was more than twenty points.

The student performance on the writing subtest was also significantly different for the two programs: 10.13 for FLES and 33.42 for immersion. As noted earlier, these findings are complicated by the fact that there is a significant difference between the two immersion schools on this subtest (11.47 and 56.75). While the mean score for the immersion program is significantly higher than for the FLES program, it should be noted that one of the FLES schools outperformed one immersion school by 2.41 points. Although this difference is not statistically significant, it raises the question of what would account for such variance within the immersion program? This question will be addressed in the next section on the effects of school variation on student performance.

How can one account for the relatively consistent pattern of differences between the two programs? Clearly, the findings indicate that the amount of exposure to a foreign language does have a positive effect on student performance. Indeed, even FLES students who had had studied French for 7-9 years were outperformed by immersion students on the four subtests who had studied for 4-6 years. A possible explanation for this difference is that the students in the French

TABLE 3

OVERALL MEAN RAW SCORES FOR FRENCH FLES AND IMMERSION PROGRAMS BY MLA SUBTEST

FRENCH FLES

Subtests	Number of Students	Mean	Stand. Dev.
Listening	83	12.31	7.40
Speaking	11	31.27	12.15
Reading	83	15.16	7.59
Writing	83	10.13	14.43

FRENCH IMMERSION

Subtests	Number of Students	Mean	Stand. Dev.
Listening	33	32.45	8.88
Speaking	11	67.09	6.14
Reading	33	35.42	10.83
Writing	33	33.42	25.51

FIGURE 3

Mean Raw Scores By MLA Subtest

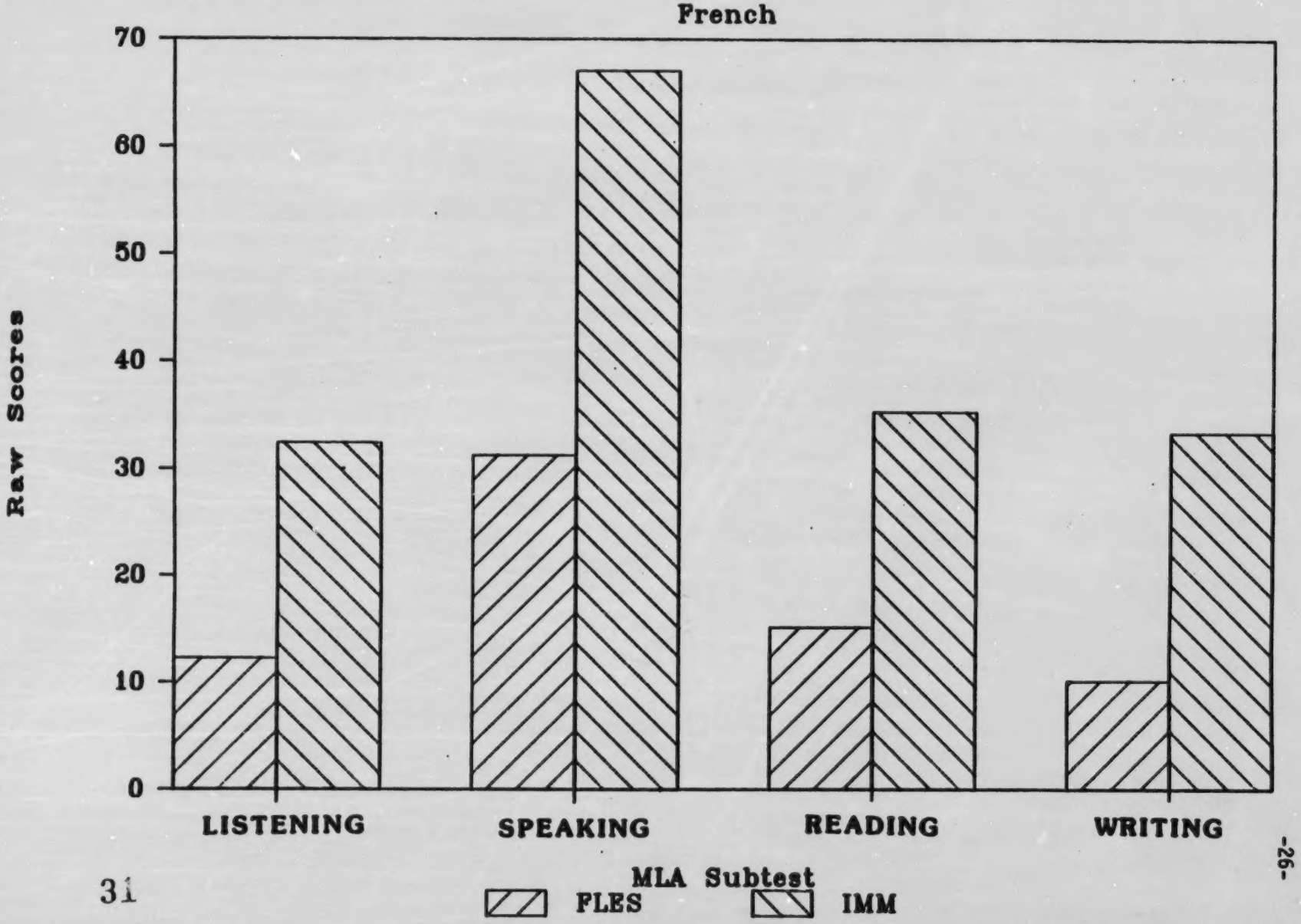


FIGURE 3

immersion programs receive an average of 75% of their total instruction per week in the foreign language. This is in contrast with the students in the French FLES programs who receive an average of 10% per week. Also, students in the immersion programs use the second language to study content courses in the core curriculum.

This pattern of program differences is also evident from Table 4 which contains the mean percentile scores by program. This permits the comparison of this student sample with high school students who took the test in 1963, as was discussed in the Methodology chapter. The graph in Figure 4 presents a clear display of these differences in student performance. For example, students in the FLES program reached the 14th percentile on the listening subtest as compared with the immersion students who reached the 80th percentile. The reading scores are similarly dispersed, with FLES at the 22nd percentile and immersion at the 77th percentile.

It should not be overlooked, however, that the students in the French FLES programs do benefit from the study of a second language. Despite their relatively low performance on the MLA test, these students did perform at the 45th percentile for speaking. The findings from this subtest, however, have to be interpreted with caution due to the small number of students who completed the speaking section. Because the students had to be tested individually, only a subsample, or 13% of the total, was used.

In addition to the problem posed by the small speaking sample, a second issue arose concerning a limitation of the speaking results. A review of Appendix F illustrates that the range of the original norming group was relatively restrictive. More specifically, a student could receive a speaking score

TABLE 4

OVERALL MEAN PERCENTILE SCORES FOR FRENCH FLES AND IMMERSION PROGRAMS BY MLA SUBTEST

FRENCH FLES

Subtests	Number of Students	Percentile Mean	Stand. Dev.
Listening	83	14	23.35
Speaking	11	43	40.23
Reading	83	22	21.48
Writing	83	9	17.14

FRENCH IMMERSION

Subtests	Number of Students	Percentile Mean	Stand. Dev.
Listening	33	80	25.73
Speaking	11	99	0.32
Reading	33	77	24.99
Writing	33	40	35.78

FIGURE 4

Mean Percentile Scores By MLA Subtest

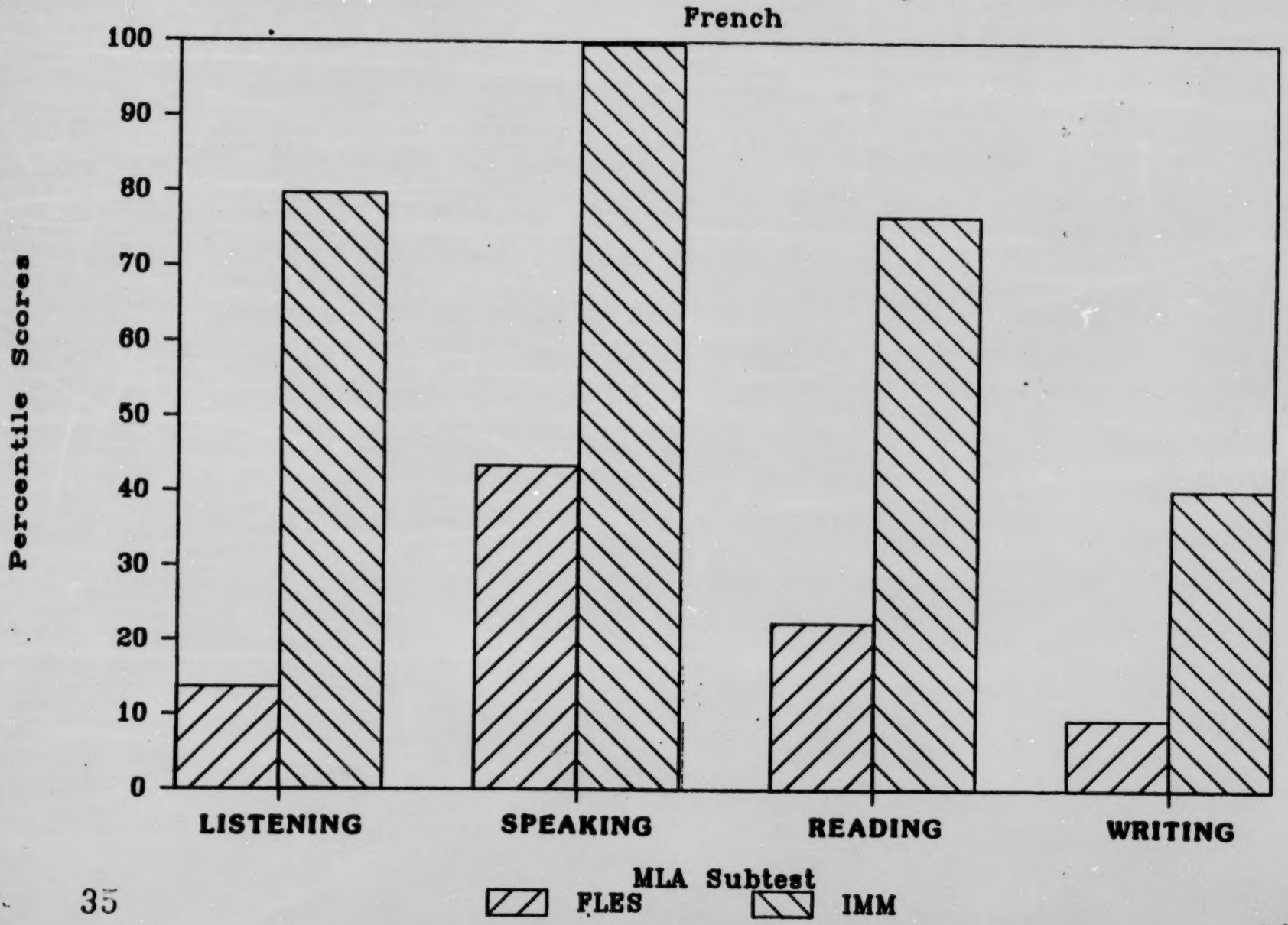


Figure 4

of 50 out of 82 and rank at the 96th percentile level. It was speculated that the speaking subtest asssessed surface facility of the language rather than communicative competence.

In an effort to determine the communicative competency of the students in this study, a second analysis was performed on the data. A speech sample elicited during the speaking subtest was rated on a scale from one to four by a fluent speaker of French (See Appendix G). The results from this analysis revealed that FLES students who performed well on the MLA still did not score higher than a 2+ as compared with the immersion students who scored at a minimum of 2+ and a maximum of 4. One can conclude that immersion students have a much greater oral facility with the foreign language.

2. How does variation in program at the school level affect student performance on the MLA Test?

As noted earlier, Table 2 illustrates the variation among the schools within the two types of French programs. Of particular interest are the significant differences found within the immersion schools on the subtests. As Figures 5a and 5b reveal, these differences are most pronounced on the listening, reading, and writing subtests. For example, the mean reading scores for the two immersion schools were 26.47 and 44.94, a spread of 18.5 points. For listening, the scores were 25.71 and 39.63, a significant difference of 13.9 points. As mentioned previously, the writing scores were the most divergent, ranging from 11.47 to 56.75.

The significant differences within the French immersion program are probably attributable to several factors. First, the students in FI-1 were in grades 4

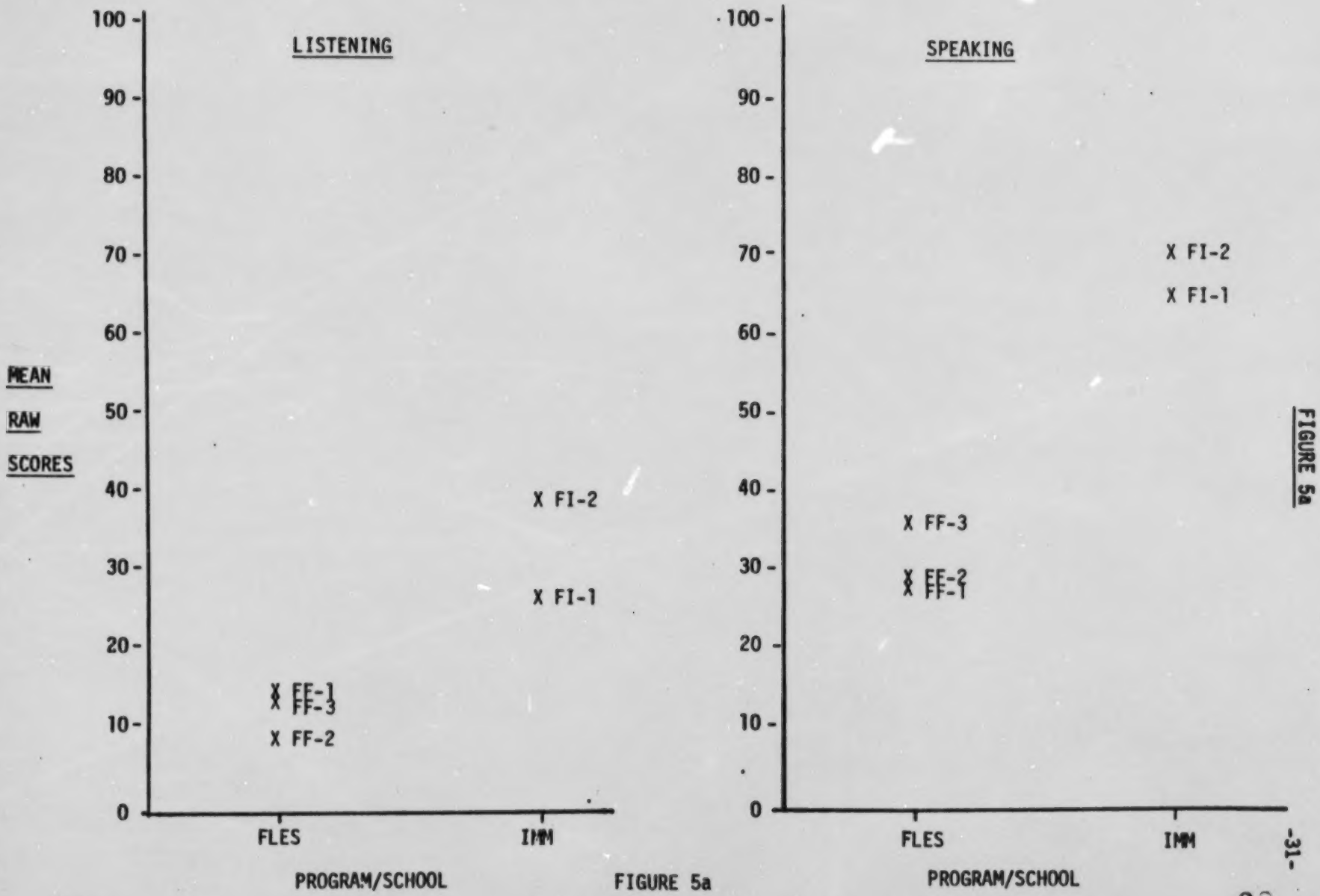


FIGURE 5a

SUBTEST MEAN RAW SCORES BY SCHOOL
FOR FRENCH PROGRAMS

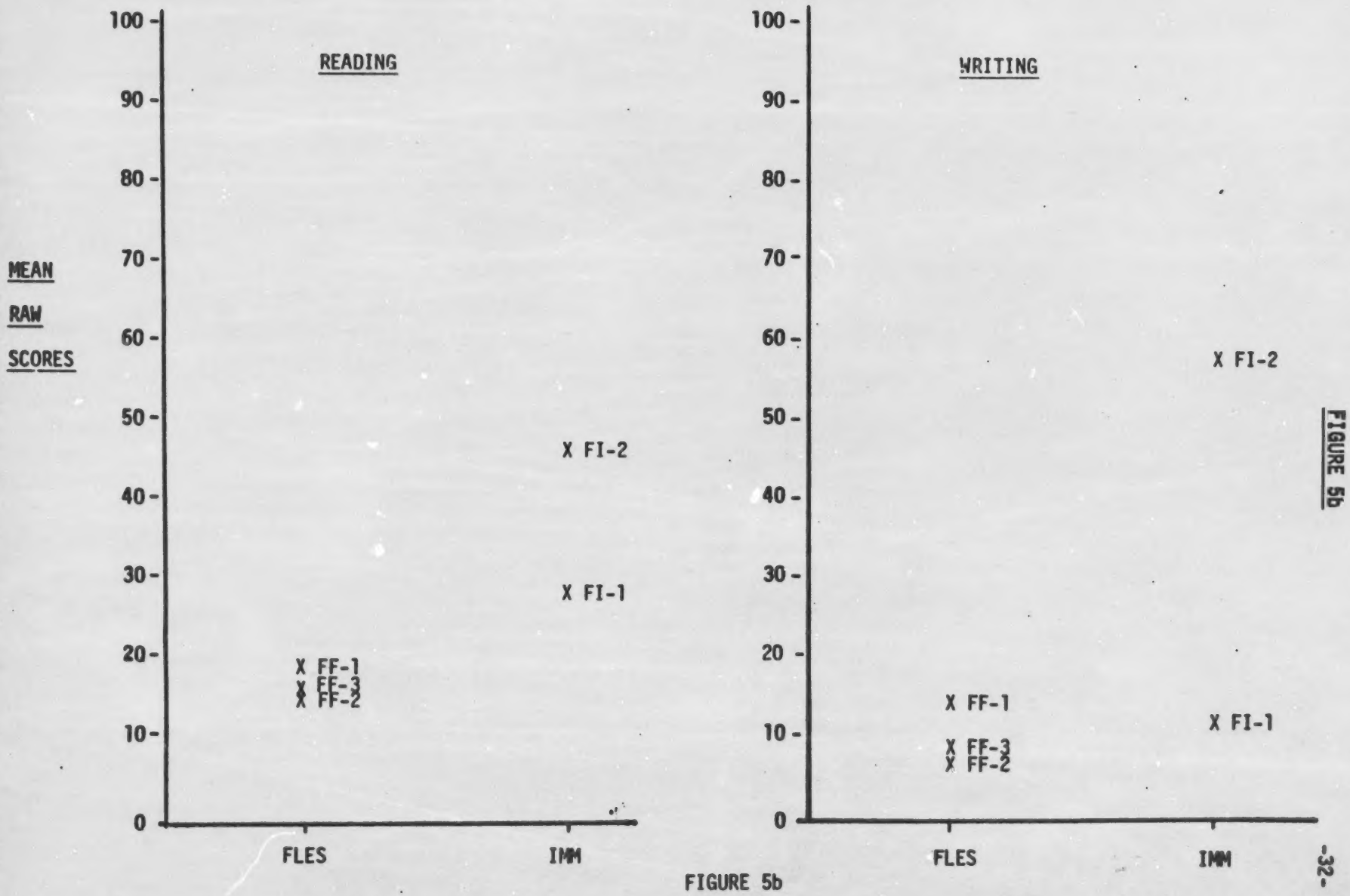


FIGURE 5b

SUBTEST MEAN RAW SCORES BY SCHOOL FOR FRENCH PROGRAMS

and 5 as compared with students in FI-2, who were in grades 5 and 6. Although all students have had a minimum of four and a maximum of six years foreign language study, the majority of students in FI-1 were in the fourth grade, while the majority of students in FI-2 were in the sixth grade. Second, the program at school FI-2 was established in 1974, and has had the same principal and little turnover among the teachers. This program continuity has facilitated well-planned articulation of language study between grades. In contrast, the program at school FI-1 was established in 1978 and students have had to deal with a different teacher each year who was new to the school and the immersion methodology. Several studies on immersion programs show that continuity and articulation of language study are important factors in the success of the program (See Cummins, 1981; Wong Fillmore, 1983; Campbell, in press).

The question arises as to why the students in FI-1 were included in the study if they differed from those in school FI-2. The answer lies in the fact that these two schools were the only French immersion programs in the United States which had been established for at least 5 years. Despite the limitations posed by the difference in student samples, the paucity of French immersion programs constrained the selection process.

It is interesting to note that the within-school differences for the French FLES program are not significant on any of the four subtests. The greatest spread of mean scores within the program was found on the speaking test, with a range of 27.33 to 35.60. The other scores indicate a strong degree of homogeneity among the three schools from the French FLES program.

This pattern of homogeneity is also evident from Figures 5a and 5b. A possible explanation for the similarities found within the FLES schools might be

the similarity of program design of the three schools. All of the FLES programs emphasize listening and speaking and have an average of 45 minutes per day of instruction in French (See Appendix H for overview and detailed site descriptions).

Results from the Student Self-Assessment Survey

What is the correlation between self-assessment and student performance on the MLA test?

Prior to completion of the MLA test, all students were asked to rate their foreign language skills in the areas of listening, speaking, reading, and writing on a scale from 0 to 4 (0=None; 1=A Little Bit; 2=Fairly Well; 3=Very Well; 4=Fluently). The students' self-assessments were correlated with their performance on the respective portions of the MLA subtests to determine the fit between the two scores. It was hypothesized that those students who had had more exposure to the foreign language would be better able to accurately assess their language skills as measured by the MLA test.

How well did the students' self-ratings reflect their test scores? The self-assessment ratings were analyzed using Spearman's Rank-Order Correlation. The analysis examined the strength of the correlation by program: FLES and immersion. The results of this analysis confirm the hypothesis that degree of exposure to the language improved the self-assessment correlation for French students. In fact, there was a strong positive correlation between student performance and self-assessment ratings on three of the four subtests. A review of Table 5 indicates a significant positive correlation for listening, reading, and writing. The results were not significant for the speaking subtest.

The results of the correlational analyses for the French FLES program

TABLE 5

CORRELATION BETWEEN SELF-ASSESSMENT AND STUDENT PERFORMANCE ON THE MLA TEST

FRENCH FLES

SELF-RATING	MLA TEST LIS	SPK	RDG	WRT
SR/LIS	0.26** 83	0.13 11	0.21 83	0.17 83
SR/SPK	0.35 83	0.24 11	0.34 83	0.18 83
SR/RDG	0.13 83	-0.34 11	0.05 83	-0.03 83
SR/WRT	0.15 83	-0.09 11	0.04 83	0.003 83

FRENCH IMMERSION

SELF RATING	MLA TEST LIS	SPK	RDG	WRT
SR/LIS	0.71** 33	0.54 11	0.68** 33	0.61** 33
SR/SPK	0.63** 33	0.56 11	0.63** 33	0.70** 33
SR/RDG	0.57** 33	0.48 11	0.60** 33	0.70** 33
SR/WRT	0.54** 33	0.43 11	0.54** 33	0.53** 33

** Significant at the 0.05 level

Note: Number at the right hand corner represents number of observations

are interesting in that they provide a different picture than that found for the immersion program. A significant positive correlation was found only for the listening score; correlation was not significant on the other three subtests. It can be concluded that students who have had more exposure to the foreign language are more adept at evaluating their language skills than those who have had less language exposure.

SPANISH LANGUAGE PROGRAMS

Results from the Modern Language Association Test

1. How does participation in one of three Spanish language programs (FLES, partial immersion, and immersion) affect student performance on the MLA Test?

The results from the MLA test for the 266 Spanish language students are presented in Tables 6a and 6b. It is evident from the data that there are differences in the scores among the programs (i.e., FLES, partial immersion, and immersion), but also, within the programs (i.e., at the school level). As in the case of the French programs, a nested analysis of variance was performed with program and school within program as the two factors. Both factors proved to be significant sources of variation at the .05 level.

What is the significance of this finding for the study? It underscores the need to examine differences in student performance within the context of the three language programs and the differences which exist at the individual school level. This variation within schools is particularly evident on the writing test, for example, where scores for the partial immersion schools range from 5.75 to 30.60, and 7.86 to 19.53 for the FLES schools. It is interesting to note, however, that there is less variation within the Spanish language schools on the subtests than in the case of the French language programs.

TABLE 6a
SUBTEST MEAN RAW SCORES BY SCHOOL FOR
SPANISH PROGRAMS
(Listening and Speaking)

L I S T E N I N G

SCHOOL*	NUMBER OF STUDENTS	MEAN	S.D.	
SF-1	15	13.47	3.52	
SF-2	7	13.29	4.23	FLES
SP-1	45	20.38	7.23	
SP-2	16	17.31	5.89	
SP-3	14	16.07	4.43	P.I.
SP-4	11	13.91	3.24	
SP-5	12	10.92	2.68	
SI-1	39	28.46	6.56	
SI-2	52	35.42	5.18	IMM
SI-3	52	37.98	3.93	

S P E A K I N G

SCHOOL	NUMBER OF STUDENTS	MEAN	S.D.	
SF-1	2	40.00	12.72	FLES
SF-2	1	23.00	-	
SP-1	5	70.00	8.22	
SP-2	0	-	-	
SP-3	3	62.33	7.77	P.I.
SP-4	0	-	-	
SP-5	0	-	-	
SI-1	3	52.67	2.31	
SI-2	6	76.16	5.30	IMM
SI-3	9	75.33	3.20	

*School Code: To ensure confidentiality of participating schools, the following code is used througout the report: The first letter refers to language (S=Spanish). The second letter refers to program type (F=FLES; P=Partial Immersion; I=Immersion). The subsequent number refers to a school within a particular program.

TABLE 6b
SUBTEST MEAN RAW SCORES BY SCHOOL FOR
SPANISH PROGRAMS
(Reading and Writing)

READING

SCHOOL	NUMBER OF STUDENTS	MEAN	S.D.	
SF-1	15	13.13	2.36	FLES
SF-2	7	12.57	2.15	
SP-1	45	17.58	8.09	
SP-2	16	16.50	4.80	
SP-3	14	11.86	4.37	P.I.
SP-4	11	13.45	4.84	
SP-5	12	12.67	3.20	
SI-1	39	25.03	6.64	
SI-2	52	30.17	7.40	IMM
SI-3	52	36.29	6.33	

WRITING

SCHOOL	NUMBER OF STUDENTS	MEAN	S.D.	
SF-1	15	19.53	10.94	FLES
SF-2	7	7.86	6.28	
SP-1	45	30.60	20.48	
SP-2	16	17.13	11.95	
SP-3	14	9.86	1.83	P.I.
SP-4	11	15.18	13.58	
SP-5	12	5.75	4.14	
SI-1	39	45.38	18.86	
SI-2	*55	59.53	19.13	IMM
SI-3	52	69.63	13.28	

*Note: 55 students took the writing subtest at school SI-2, as compared to 52 who took the reading and listening subtests.

The summary of mean raw scores in Table 7 reveals a clear pattern in overall student performance on the four subtests: Students in the Spanish immersion programs outperformed their peers on all four language tests. They were followed by the students in the partial immersion and then the students in the FLES programs.

Several results are of particular interest. First, the differences between the immersion and FLES programs on the four subtests are highly significant: Spanish immersion students outperformed the FLES students by more than two to one in terms of raw scores attained on the subtests. It is evident from Table 7 that the mean raw scores on the listening test for the Spanish FLES and immersion students were 13.40 and 34.45 respectively. This difference was found to be significant at the .05 level using a Scheffe Test.

The differences between the immersion and FLES programs were most pronounced on the writing subtest, with a range of 59.35 (immersion) to 15.81 (FLES) (See Figure 6). These differences were also evident for reading, with a spread of 18.04 points between the two programs. For speaking, the mean raw scores for FLES and immersion were 34.33 and 71.83 respectively. The results from the Scheffe Test indicated that these differences were significant at the .05 level.

The situation becomes a bit more complicated when a comparison is made between the Spanish FLES and partial immersion programs on the four subtests. While the students in the partial immersion program did perform better than the FLES students on the test overall, the differences were significant only on the listening and speaking portions. No such significant difference was found on the reading and writing sections of the test.

The above pattern changes when students from the Spanish immersion program are compared with those in the partial immersion program. There was a significant difference in student performance on the listening, reading, and writing subtests. Students in the Spanish immersion program scored at least two times higher on these portions of the test than those in the partial immersion program. The differences between the two programs were not significant for the speaking test.

How can one account for the relatively consistent pattern of differences among the three programs? Clearly, the findings indicate that the amount of exposure to a foreign language does have a positive effect on student performance. As was noted earlier, the average amount of foreign language instruction differs substantially for FLES and immersion students. In the case of the Spanish programs, students in immersion programs receive approximately 4.5 hours (75%) of instruction per day, in contrast with students in FLES programs, who receive an average of 30-40 minutes (10%) of instruction per day. It is difficult to quantify the amount of exposure received by students in the partial immersion program given the wide variation among the five schools selected for this study. The range of time spent using Spanish in these programs is 1.5-3 hours (23%-60%) of instruction per day.

Another way to view this data is to examine the mean percentile scores. These scores permit one to compare this student sample with high school students who took the test in 1963 (See Appendix I for original norms). It can be seen from Table 8 that the students in the FLES programs reached the 22nd percentile on the listening subtest as compared with the 39th percentile for partial immersion and the 88th for immersion. These percentile scores as depicted in Figure 7

TABLE 7

OVERALL MEAN RAW SCORES FOR SPANISH FLES, PARTIAL IMMERSION AND IMMERSION PROGRAMS BY MLA SUBTEST

SPANISH FLES

Subtests	Number of Students	Mean	Stand. Dev.
Listening	22	13.40	3.66
Speaking	3	34.33	13.31
Reading	22	12.95	2.26
Writing	22	15.81	11.05

SPANISH PARTIAL IMMERSION

Subtests	Number of Students	Mean	Stand. Dev.
Listening	98	17.38	6.67
Speaking	8	67.13	8.46
Reading	98	15.52	6.70
Writing	98	20.66	18.15

SPANISH IMMERSION

Subtests	Number of Students	Mean	Stand. Dev.
Listening	143	34.45	6.44
Speaking	18	71.83	9.57
Reading	143	30.99	8.13
Writing	146	59.35	19.55

FIGURE 6

Mean Raw Scores By MLA Subtest

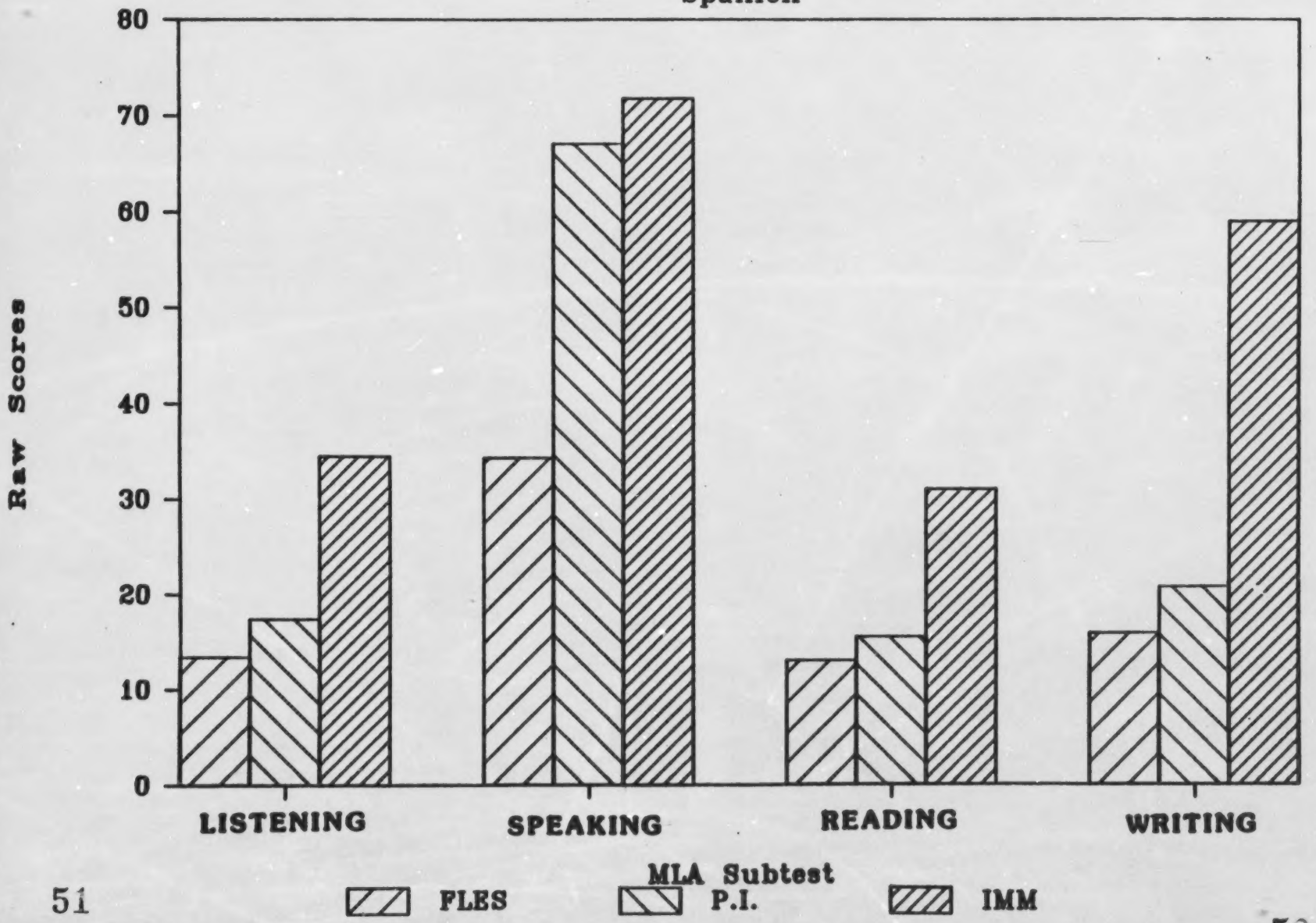


Figure 6

TABLE 8

OVERALL MEAN PERCENTILE SCORES FOR SPANISH FLES, PARTIAL IMMERSION AND IMMERSION PROGRAMS BY MLA SUBTEST

SPANISH FLES

Subtests	Number of Students	Percentile Mean	Stand. Dev.
Listening	22	22	16.67
Speaking	3	65	31.60
Reading	22	14	6.92
Writing	22	16	13.78

SPANISH PARTIAL IMMERSION

Subtests	Number of Students	Percentile Mean	Stand. Dev.
Listening	98	39	26.89
Speaking	8	99	.42
Reading	98	27	22.53
Writing	98	21	22.00

SPANISH IMMERSION

Subtests	Number of Students	Percentile Mean	Stand. Dev.
Listening	143	88	13.22
Speaking	18	99	.46
Reading	143	75	20.08
Writing	146	69	22.66

FIGURE 7

Mean Percentile Scores By MLA Subtest

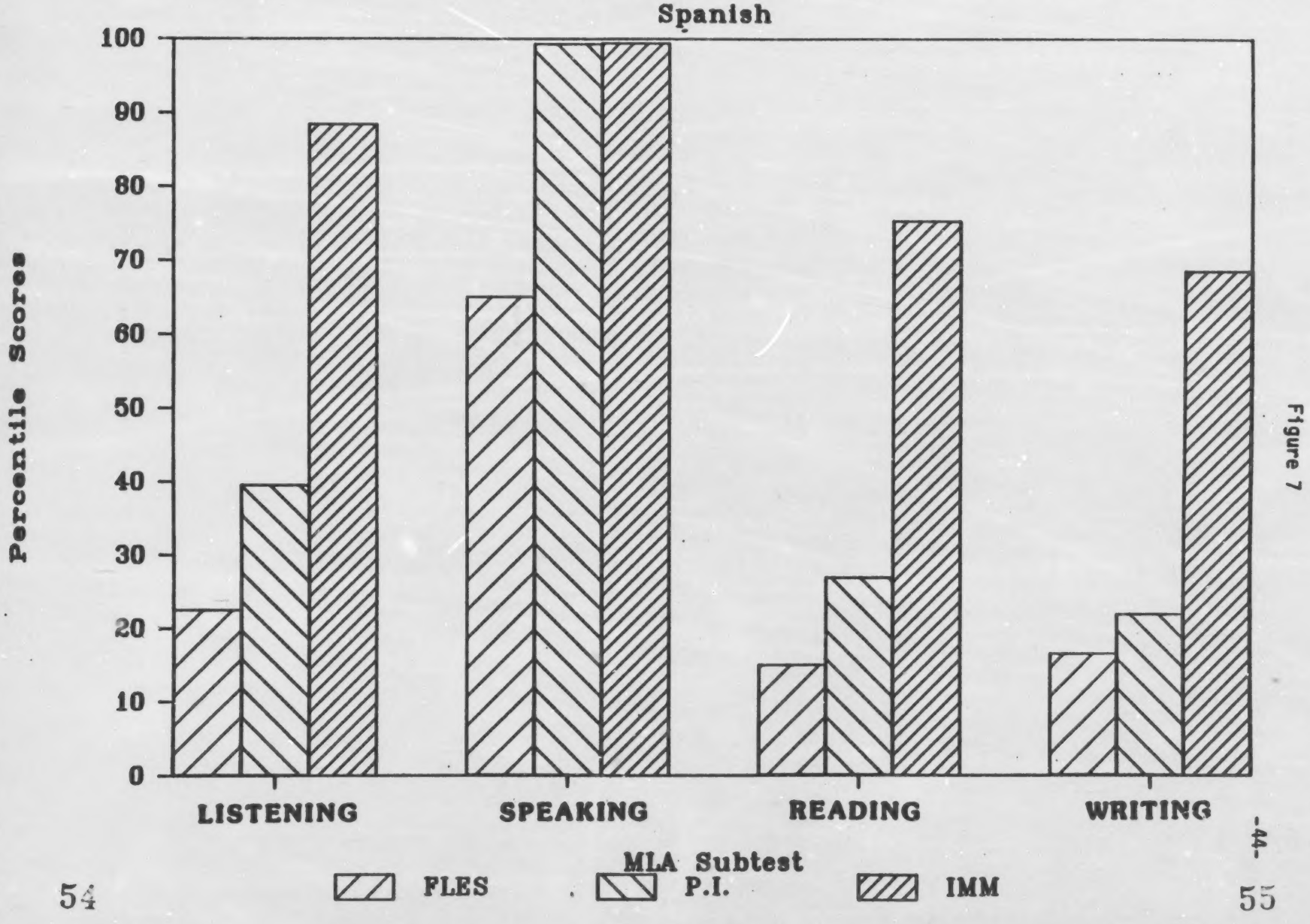


Figure 7

clearly show that the immersion students faired at the upper percentile levels on all four subtests.

It is interesting to note how students in the FLES program, which places a great deal of emphasis on the development of oral language skills, performed on the speaking section of the test. Although these students were outperformed by their peers in the partial and total immersion programs, the mean speaking score for FLES of 34.33 has a percentile ranking of 65. These results indicate that students in the Spanish FLES program performed as well or better than 65 percent of the original norming group of high school students.

As noted earlier, these speaking results need to be interpreted with reservation due to the small sample size and the restrictive range of the original norming sample. The results of a second analysis of the speaking data revealed that the Spanish immersion students evidenced a stronger ability than their partial immersion or FLES peers to use the foreign language for communicative purposes. It was interesting to note that the students in partial immersion did substantially better than their FLES peers despite the fact that the latter program focuses on oral language development. While these results are far from conclusive, they provide a window to the potential communicative skills of these foreign language students.

2. How does variation in program at the school level affect student performance on the MLA Spanish Test?

An examination of Figures 8a and 8b reveals the variation which exists within the ten Spanish language schools. Of the three programs, the data from the FLES schools are most homogeneous--particularly on the listening

and reading subtests. The differences are significant on the writing test, with a spread of 11.67 points. A greater discrepancy exists between the two FLES schools on the speaking scores, although this may be attributed to the relatively small number of students who took this subtest (3 in total).

It should be noted that there is a consistent pattern of differences between the two FLES schools, with students in school SF-1 outperforming students in school SF-2. A possible explanation is that students in SF-1 receive one more instructional hour in Spanish per week than those students in SF-2.

The results on the MLA test for the partial immersion program can be seen in Figures 8a and 8b, which display the mean raw scores for the four subtests. The data indicate relatively little variation within the schools on the reading test, with scores ranging from 11.86 to 17.58. According to the Scheffe Test, these differences are not significant. On three of the tests (listening, reading and writing), one school (SP-5) had the lowest mean scores for the entire Spanish language sample. For writing, the mean score was actually 2.11 points lower than the lowest FLES score of 7.86. If one were to remove school SP-5 from the partial immersion sample, there would be a high degree of homogeneity among the schools.

One of the possible reasons for the low performance of the students in school SP-5 is that there is no content instruction in Spanish, as compared with the other partial immersion schools. In addition, students in SP-5 have the lowest socio-economic level of all the students who participated in the study.

The results from the Spanish immersion schools indicate a consistent pattern of performance on the MLA test, with the exception of the speaking subtest.

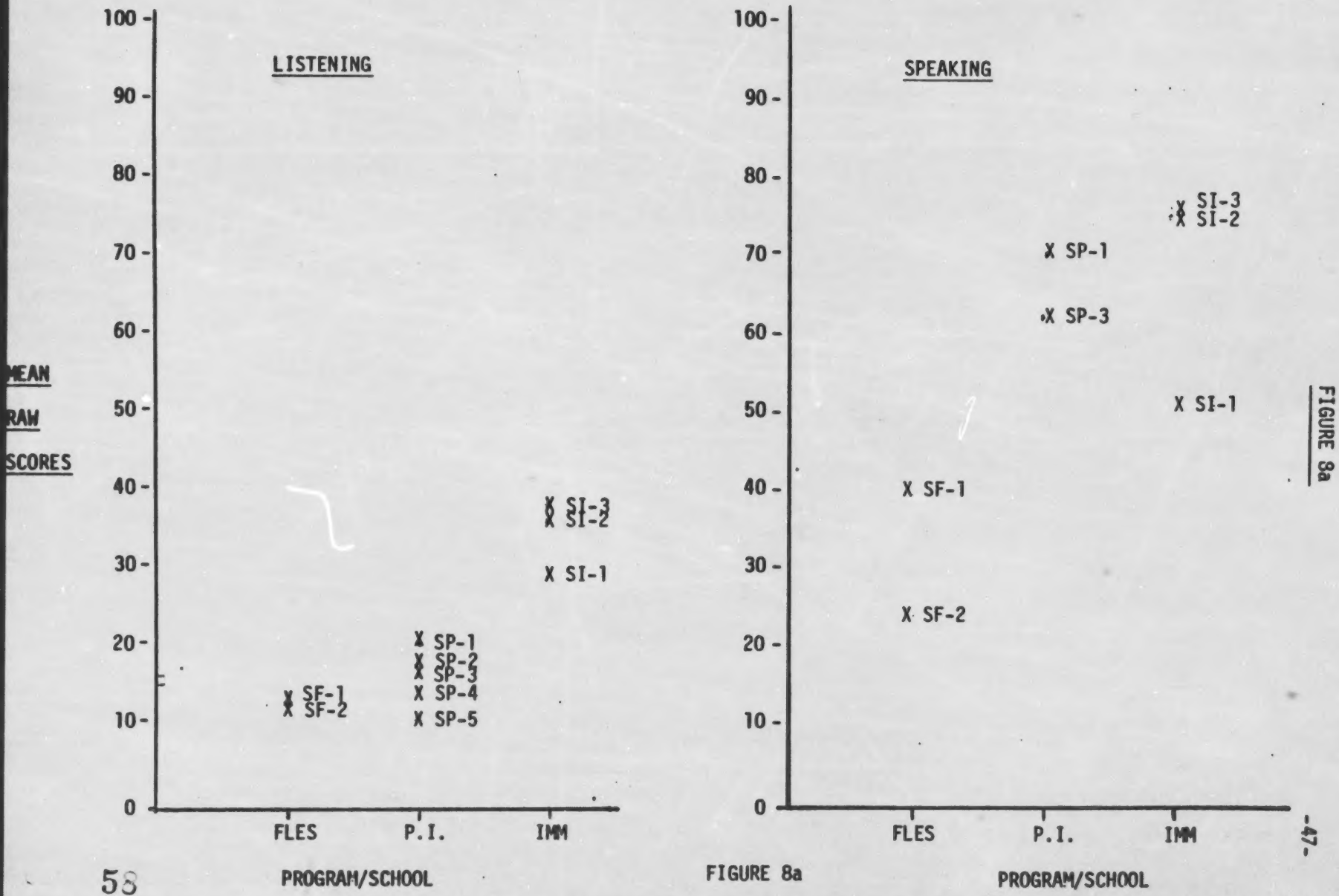


FIGURE 8a

SUBTEST MEAN RAW SCORES BY SCHOOL
FOR SPANISH PROGRAMS

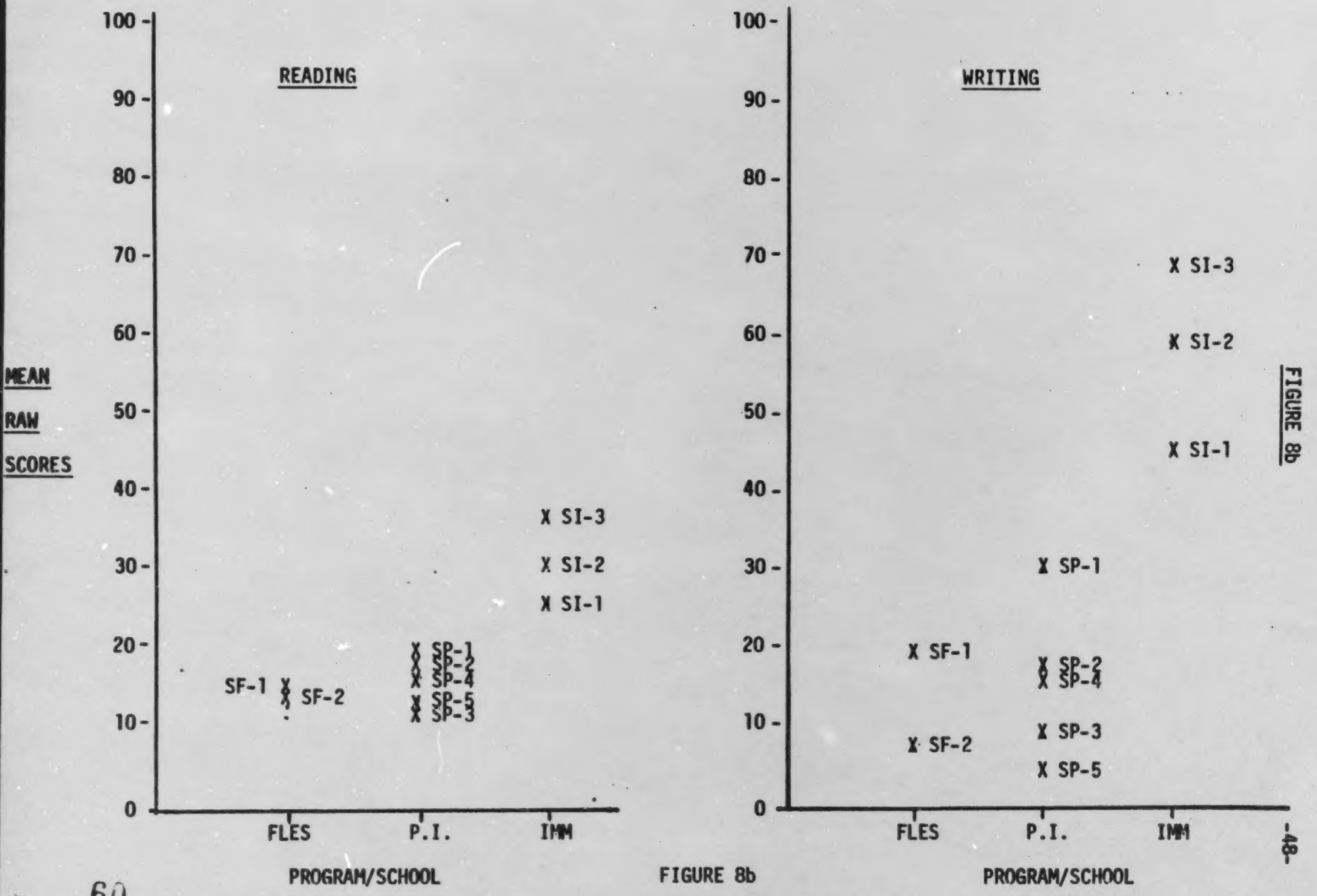


FIGURE 8b

SUBTEST MEAN RAW SCORES BY SCHOOL
FOR SPANISH PROGRAMS

Students in SI-3 significantly outperformed the others on the three subtests of listening, reading, and writing. The differences are most pronounced on the writing subtest, with scores ranging from 45.38 to 69.63.

Of interest is the reversal of the pattern of scores on the speaking subtest. Although the difference was small, school SI-2 performed better than school SI-3 (76.16 and 75.33 respectively). What is the possible explanation for this occurrence in the test results? School SI-2 is an elementary school where 90% of the school day is conducted in Spanish. School SI-3, on the other hand, is a junior high school where 50% of the day is conducted in Spanish, with emphasis on academic subjects.

Results from the Student Self-Assessment Survey

What is the correlation between self-assessment and student performance on the MLA test?

As noted earlier, the results from the Student Self-Assessment Survey were correlated with student performance on the respective portions of the MLA test to determine the fit between the two scores. This analysis was performed using Spearman's Rank Order Correlation.

An examination of Table 9 reveals that students with more intense exposure to the language, i.e., immersion and partial immersion students, were better able to predict their performance on the MLA test as measured by the survey. The scores from the Spanish FLES students showed no significant correlation on any of the four subtests. It is interesting to note that the scores for the students from the immersion and partial immersion schools were, for all intents and purposes, identical: there was a significant correlation for the listening and writing tests. The results were not significant for either

TABLE 9

CORRELATION BETWEEN SELF ASSESSMENT AND STUDENT PERFORMANCE ON THE MLA TEST

SPANISH FLES

SELF RATING	MLA TEST LIS	SPK	RDG	WRT
SR/LIS	0.14 22	0.95 3	0.03 22	0.19 22
SR/SPK	-0.25 22	0.68 3	0.07 22	0.07 22
SR/RDG	0.09 22	0.00 3	0.03 22	0.16 22
SR/WRT	-0.05 22	0.95 3	0.39 22	0.18 22

SPANISH PARTIAL IMMERSION

SELF RATING	MLA TEST LIS	SPK	RDG	WRT
SR/LIS	0.29** 98	0.19 8	0.16 98	0.12 98
SR/SPK	0.27** 98	-0.19 8	0.21 98	0.23 98
SR/RDG	0.20 98	-0.01 8	0.08 98	0.19 98
SR/WRT	0.32** 98	-0.08 8	0.23 98	0.30** 98

SPANISH IMMERSION

SELF RATING	MLA TEST LIS	SPK	RDG	WRT
SR/LIS	0.30** 143	0.24 18	0.27** 143	0.29** 146
SR/SPK	0.05 143	0.42 18	-0.04 143	0.06 146
SR/RDG	0.18 143	0.12 18	0.10 143	0.14 146
SR/WRT	0.25** 143	0.26 18	0.24** 143	0.30** 146

** Significant at the 0.05 level.

Note: Number at lower right hand corner indicates number of observations

program on the speaking and reading tests.

What do these data illustrate about the reliability of self-assessment ratings for language skills? First, the reliability of self-assessment reports for language are indeed related to the degree of exposure and proficiency in the target language. Second, it is evident from the data that some of the students, particularly those in the FLES program, had an inflated perception of their language skills.

CONCLUSION

Limitations of the Study: Future Research Issues

As with most research, this study raises as many questions as it answers. One of the questions that this study clearly answers is, "Does participation in a particular language program significantly affect language proficiency?" The answer to this question is definitely yes. Children in immersion programs -- whether French or Spanish -- perform significantly better than their FLES counterparts in all four language skill areas.

The question then arises as to the degree and extent of their language facility. Will this facility enable them to participate effectively in core curriculum subjects, e.g., social studies and mathematics? Will they be able to engage in a variety of activities appropriate to their age level using the foreign language, e.g., recreational activities and cultural events? To address these questions, there needs to be some type of "anchoring" of the test scores with qualitative, ethnographic-type data, to more precisely determine the language skills of these students.

As one relates these study findings to the concerns of those seeking to improve the educational system, a fundamental question immediately comes to mind: Does foreign language study enhance the mastery of basic skills such as mathematics and reading? While this question is not addressed in the present study, it is important if convincing arguments are to be made concerning the role of foreign language study in the core curriculum. One of the strengths of the Canadian immersion studies was that, in addition to examining the children's foreign language skills, information was collected about performance in mathematics, social studies, and other school subjects. This issue of the effects of foreign language study on academic achievement needs to be

addressed in subsequent research efforts in the United States.

Another question which arises is whether time spent studying a foreign language at an early grade level will result in greater educational yield than study later in the curriculum. Several Canadian studies have examined the relative efficacy of early immersion versus late immersion. The data, however, is still too fragmentary to be conclusive (Swain, 1978; Genesee, in press). This question can only be addressed in a longitudinal study of foreign language programs, as they have been implemented in the United States.

A final question of interest is whether one instructional program (immersion, partial immersion, or FLES) is better suited for one group of children than another. Do some students flourish in a particular program due to their intellectual abilities and personality characteristics? In addition, the present study revealed a substantial degree of variation between schools that had the same type of program. Can one infer that a particular language program was molded to the specific needs of the participating students? The present study does not examine the fit between instructional and student characteristics, primarily because the relevant student information (socio-economic status, parental background, etc.) was not available to the researchers. This is an important research issue which needs to be addressed in future studies because it will provide valuable information for both educators and policy makers interested in foreign language instruction.

The ability to conduct a rigorous study of the relationship between foreign language proficiency and program type necessitates the development of appropriate assessment instruments. It is certainly the case that the MLA tests for French and Spanish used in the present study are not adequate to provide

appropriate and precise data regarding diverse aspects of language proficiency. It is evident that immediate attention needs to be given to the development of a variety of testing instruments to assess communicative competence, as well as control over a variety of more traditional "school based" abilities. The development of the aforementioned assessment instruments would be necessary to fulfill the mandate of a comprehensive research agenda for foreign language studies.

Policy Implications of the Study

This study set out to compare three approaches currently being employed in the foreign language education of elementary school children in communities across the United States. It was felt timely to conduct this research given the increasing awareness of the critical importance of foreign language resources as they relate to our academic, commercial, and socio-political interests both at home and abroad. A second purpose was to provide an evaluation upon which informed decisions could be based. The results of this study provide extremely clear indications of the student gains that can be reasonably expected from the three programs discussed in this report.

Although the interaction of the variables is numerous, the overall effects of the three approaches are apparent. Students who participate in immersion programs will perform on standard measures of foreign language proficiency at levels significantly higher, in all skills, than those who participate in FLES programs. Furthermore, children who participate in partial immersion programs will perform, in all skills, at levels that fall between those of FLES and immersion students.

The results reported here leave little doubt as to the relative efficacy of these three approaches when students' overall language proficiency is the objective. Immersion, setting the most ambitious language fluency goals, reaches the highest level of proficiency. Partial immersion ranks second in proficiency attainment, and FLES, whose goals are the least ambitious of the three, ranks third.

Immersion teaching is based on the successful combination of extensive exposure to the foreign language throughout elementary school and acquisition of the foreign language through content material. In contrast to FLES and partial immersion, immersion teaching places little emphasis on formal language teaching. The essential features of the immersion program model appear to be consistent with current theories of second language acquisition.

Previous research on immersion students' achievement supports and substantiates the high level of proficiency attained in this study as a result of extended participation in this type of program. Yet all reports state, that even after seven years of involvement in immersion, the students do not attain full control of all the phonological and grammatical features of the foreign language. Parents and school officials must not expect that their children will emerge from immersion programs with native-like fluency. They can expect, however, that their children will have an opportunity to make gains far beyond those reported from any other foreign language program offered in our schools.

Students in partial immersion programs demonstrated levels of proficiency that were, generally, significantly higher than their FLES counterparts. These levels were not, however, nearly as high as those in immersion programs. This finding is difficult to generalize given the range in methodologies in the five

partial immersion schools studied. However, since partial immersion typically contrasts with FLES in two important ways, the findings may be explained in programmatic differences. Exposure to the foreign language is greater in partial immersion programs and, generally, some part of the core curriculum is taught in the foreign language. Thus, the partial immersion approach carries language teaching a step beyond focus on formal language instruction.

FLES programs, with the least ambitious goals of the three, rank lower than partial immersion or immersion in proficiency level on all skills. Students in FLES programs, however, performed relatively well on oral proficiency. It is not surprising that they were unable to perform well on the reading and writing subtests given their limited exposure to these skills.

It is hoped that the results of this study will be of great interest to several different audiences. Local school leaders and parents can utilize this information in making decisions to initiate or continue foreign language instruction in their schools. Middle and secondary school modern language teachers may want to consider the impact children emerging from elementary school foreign language programs might have on their course offerings. The typical graduate from an elementary school immersion program will have acquired skills that surpass those of typical high school foreign language students. It is clear that teachers will have unique opportunities to guide these students to a level of foreign language study seldom, if ever, experienced before in pre-university programs.

It is equally clear that traditional language courses would be inappropriate for these students with extensive foreign language backgrounds. Teachers will be challenged to design courses that take full advantage of these

students' previously acquired ability to use the foreign language for authentic scholastic and social purposes. Foreign language teaching in this country may undergo a major restructuring in terms of content and objective as substantial numbers of students seek effective instruction in their foreign language at the middle and secondary levels.

Looking toward the future, if secondary school language teachers can accommodate these FLES, partial immersion, and immersion students, then they will have an equally significant impact on university foreign language programs. In addition, teacher preparation programs at the university level will have to respond to the need for training teachers to be knowledgeable in elementary school teaching methodologies.

It is difficult not to be excited by the potential contributions to foreign language studies that the apparent successes of immersion programs portend. It would appear that, with minimal investments of material resources and with no apparent reduction in overall scholastic achievement, the schools in the United States can provide children with unprecedented opportunities to acquire very high levels of foreign language proficiency.

In addition to those mentioned above, there is a group of scholars who might very well be interested in the results of this study, namely, researchers who inquire into the efficacy of immersion as a medium for foreign language acquisition. There is an extraordinarily close match between the optimal conditions for successful language acquisition as assumed by many theorists and those conditions found in immersion programs (See Dulay, Burt, & Krashen, 1982). It will be interesting, therefore, for these scholars to ascertain whether immersion participants' successes tend to confirm or fall short of

their expectations. For example, Krashen's "input hypothesis" suggests that acquisition is enhanced by "comprehensible input." As has been reported in this study, immersion students receive 50 to 80 percent (4000-4500 instructional hours) of their elementary school instruction in the foreign language. As has been seen, in comparison to students in other foreign language programs, immersion students do extremely well. Yet, immersion students do not attain native-speaker competence even after seven years of participation. Second language acquisition researchers will find it challenging to distinguish those features of immersion that have precluded students from reaching this level of achievement (Swain, 1983).

There is one final group that might well find the results of this study of some importance, namely, the American public. For generations we have come to expect very little from our investment of time, energy, and material resources in foreign language instruction. Only a very small percentage of those who have studied foreign languages in our schools can use those languages for any useful or enjoyable purpose. Consequently, there has been a general public malaise regarding foreign language programs for American youth. The public, including state and national legislators, school officials, and parents, now have evidence that there is an approach that does provide opportunities for acquisition to a level that permits children to use the foreign language for all their scholastic and social needs.

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APPENDICES

APPENDIX A

PARTICIPANTS IN STUDY

Target Language	Type of Program	School	No. of Subjects	No. of Subjects by Sex		Age Range	Grade Range	Years of Foreign Language Study
				Male	Female			
FRENCH	Immersion	FI1	17	7	10	9-11	4-5	4-5
		FI2	16	4	12	10-12	5-6	4-6
	FLES	FF1	16	8	8	11-13	6-7	4-6
		FF2	7	3	4	12-15	6-8	4-6
		FF3	60	27	33	9-14	4-8	4-6
	Total		116					
SPANISH	Immersion	SI1	39	18	21	10-12	5-6	5-7
		SI2	55	20	35	10-12	5-6	5-6
		SI3	52	16	36	12-15	7-9	5-7
	Partial Immersion	SP1	45	21	24	11-13	6	5-7
		SP2	16	6	10	10-12	5	5-7
		SP3	14	8	6	10-11	5	5-6
		SP4	11	5	6	10-12	5	5-6
		SP5	12	5	7	10-12	5	5-6
	FLES	SF1	15	11	4	10-14	5-8	5-7
		SF2	7	6	1	12-14	6-8	5-7
	Total		266					

APPENDIX B

FRENCH LANGUAGE SCHOOL CHARACTERISTICS

Type of Program	School Code	Initiated by	Ethnicity of Students	Selection Criteria	Est. % of Content Courses Taught in Foreign Language*		Est. % of Formal FL Instruction Per Week*		No. of Lang. Teachers Per School	No. of Teachers Who Are Native Speakers
Immersion	FI1	Curriculum specialist	60% Anglo 40% Minority	Parental choice/ Magnet school	K-1 2 3 4 5	100% 85-90% 80-85% 70% 50%	K-6	0%	6	1
	FI2	Principal	75% Anglo 25% Minority	Parental choice/ Magnet school	1-3 4 5-6	80% 60% 50%	K-6	0%	7	5
FLES	FF1	Parish	99% Anglo 1% Minority	School criteria	K-8	0%	K-3 4-5 6 7-8	0% 6% 11% 15%	2	0
	FF2	School board	50% Anglo 50% Minority	Parental choice/ Magnet school	K-8	0%	K-1 2 3-4 5-8	5% 8% 10% 15%	1	0
	FF3	Diocese/ Parents	73% Anglo 27% Minority	Parental choice	K-8	0%	K-8	10-13%	2	1

*Note: Estimated percent is the percent per week of instruction, based on an average school day of six hours.

APPENDIX C

SPANISH LANGUAGE SCHOOL CHARACTERISTICS

Type of Program	School Code	Initiated by	Ethnicity of Students	Selection Criteria	Est. % of Content Courses Taught in Foreign Language*	Est. % of Formal FL Instruction Per Week*	No. of Lang. Teachers Per School	No. of Teachers Who Are Native Speakers
Immersion	SI1	UCLA professors	90% Anglo 10% Minority	Parental choice	K-1 100% 2-3 80% 4-6 60%	K-6 0%	6	3
	SI2	School Board	50% Anglo 50% Minority	Parental choice/ Magnet school	K-2 100% 3-6 80%	K-2 0% 3-6 20%	17	12
	SI3	School Board	10% Anglo 90% Minority	Parental choice/ Magnet school	7-9 50%	7-9 10%	6	3
Partial Immersion	SP1	School Board	65% Minority	Parental choice/ Magnet schools	6-8 0%	6-8 22%	80	25
	SP2		60% Minority		K-5 0%	K-5 22%		
	SP3		60% Minority		K-5 25%	K-5 22%		
	SP4		60% Minority		K-5 50%	K-5 22%		
	SP5		90% Minority		K-5 0%	K-5 22%		
FLES	SF1	Parents	99% Anglo 1% Minority	School criteria	K-8 0%	K-4 8% K-7 17% 8 8%	2	0
	SF2	School Board	50% Anglo 50% Minority	Parental choice/ Magnet school	K-8 0%	K-1 5% 2 8% 3-4 10% 5-8 15%		

*Note: Estimated percent is the percent per week of instruction, using an average school day of six hours.

APPENDIX D

Protocol FOR STUDY OF IMMERSION/FLES Programs
April/May 1983

Program Information

1. When did the program begin? _____

2. Who/what initiated the program?

   _____Parents _____School board

   _____Teacher(s) _____Other (Explain)

3. How are students selected for your program?

   _____Parental choice _____school imposed criteria (e.g. test scores, school achievement)

   _____school requirement

4. What is/are the target language(s)? _____

5. Why was/were this language(s) selected?

   _____local population _____academic needs of students

   _____status _____existing teacher/staff resources

   _____Other (explain)

6. What is the ethnic make-up of the class/school?

   _____Asian _____Anglo _____Other

   _____Black _____Hispanic

7. Are there any native speakers of the target language in the class/program/school?

8. Rank the following five areas in terms of the emphasis given them in your program:

   _____cross-cultural understanding _____listening

   _____reading _____speaking

   _____writing

9. Do you or does your program subscribe to a specific methodology?

10. Do you follow a curriculum? _____ (How was this curriculum developed)?

11. How many hours per (day/week/year) are there in content instruction of L2?

	Lang Arts	Math	Soc Studies	Science	Extra-curricular Activities: (e.g. field trips, student exchanges
K					
1					
2					
3					
4					
5					
6					

12. What are your per pupil (above regular per pupil) costs of running your program?

13. Is there a plan for a follow-up program after elementary school? _____

If so, please describe.

Questions for Principal/Director:

1. How many teachers are there in your program? _____

2. How many of these teachers are native speakers of the L2? _____

3. What are their national origins?

4. Has there been staff continuity in your program?

APPENDIX E

Dear Student:

PLEASE FILL IN THIS FORM.

Name:_____ Age:_____

Name of school:_____ Grade:____

Place of birth:_____
(City) (State) (Country)

How many years have you studied a foreign language?_____

How well do you:	None	A little bit	Fairly Well	Very Well	Fluently
Speak Spanish/French?					
Understand Spanish/French?					
Write Spanish/French?					
Read Spanish/French?					

(Circle the language you are studying)

Why are you studying Spanish/French in school?

_____

_____

_____

Thank You

French Listening and Speaking, Level L: High School Audio-Lingual Norms—Second Year

Listening

Raw Score		Converted Score	Percentile Band		Mid-Percentile Rank
Form LA	Form LB				
45		184-185			
43 - 44	45	182-183			
42	44	180-181	99	-99.9	99.8
40 - 41	42 - 43	178-179	96	-99.9	99.2
39	40 - 41	176-177	94	-99.8	99
37 - 38	39	174-175	92	-99.2	96
36	37 - 38	172-173	88	-99	94
34 - 35	35 - 36	170-171	87	-96	92
33	34	168-169	83	-94	88
31 - 32	32 - 33	166-167	80	-92	87
30	30 - 31	164-165	74	-88	83
28 - 29	29	162-163	71	-87	80
26 - 27	27 - 28	160-161	62	-83	74
25	26	158-159	55	-80	71
23 - 24	24 - 25	156-157	44	-74	62
22	22 - 23	154-155	39	-71	55
20 - 21	21	152-153	30	-62	44
19	19 - 20	150-151	21	-55	39
17 - 18	17 - 18	148-149	17	-44	30
16	16	146-147	9	-39	21
14 - 15	14 - 15	144-145	6	-30	17
13	12 - 13	142-143	2	-21	9
11 - 12	11	140-141	1	-17	6
10	9 - 10	138-139	0.1	- 9	2
8 - 9	7 - 8	136-137	0.1	- 6	1
6 - 7	6	134-135			
5	4 - 5	132-133			
3 - 4	2 - 3	130-131			
2	1	128-129			
0 - 1	0	126-127			

Number of Students	625
Number of Schools	30
Mean	155
Standard Deviation	10
Upper Quartile	160
Median	154
Lower Quartile	147
SCAT-V Mean	294
SCAT-V Standard Deviation	12

Speaking

Raw Score		Converted Score	Percentile Band		Mid-Percentile Rank
Form LA	Form LB				
82		204-205			
80 - 81		202-203			
78 - 79		200-201			
76 - 77		198-199			
74 - 75		196-197			
73		194-195			
71 - 72		192-193			
69 - 70	80,81 - 82	190-191			
67 - 68	78 - 79	188-189			
65 - 66	76 - 77	186-187			
63 - 64	73,74 - 75	184-185	99.4	-99.9	99.4
62	71 - 72	182-183	99.4	-99.9	99.4
60 - 61	69 - 70	180-181	99	-99.4	99.4
58 - 59	66 - 67,68	178-179	98	-99.4	99.4
56 - 57	64 - 65	176-177	97	-99.4	99
54 - 55	62 - 63	174-175	97	-99.4	98
53	59 - 60,61	172-173	96	-99	97
51 - 52	57 - 58	170-171	96	-98	97
49 - 50	54,55 - 56	168-169	92	-97	96
47 - 48	52 - 53	166-167	83	-97	96
45 - 46	50 - 51	164-165	83	-96	92
43 - 44	47,48 - 49	162-163	76	-96	85
42	45 - 46	160-161	69	-92	83
40 - 41	43 - 44	158-159	61	-85	76
38 - 39	40 - 41,42	156-157	50	-83	69
36 - 37	38 - 39	154-155	41	-76	61
34 - 35	35,36 - 37	152-153	38	-69	50
33	33 - 34	150-151	33	-61	41
31 - 32	31 - 32	148-149	22	-50	38
29 - 30	28,29 - 30	146-147	16	-41	33
27 - 28	26 - 27	144-145	10	-38	22
25 - 26	24 - 25	142-143	8	-33	16
23 - 24	21 - 22,23	140-141	4	-22	10
22	19 - 20	138-139	0.6	-16	8
20 - 21	17 - 18	136-137	0.1	-10	4
18 - 19	14 - 15,16	134-135	0.1	- 8	0.6
16 - 17	12 - 13	132-133			
14 - 15	9,10 - 11	130-131			
13	7 - 8	128-129			
11 - 12	5 - 6	126-127			
9 - 10	2,3 - 4	124-125			
7 - 8	0 - 1	122-123			
5 - 6		120-121			
3 - 4		118-119			
2		116-117			
0 - 1		114-115			

Number of Students	157
Number of Schools	8
Mean	152
Standard Deviation	9
Upper Quartile	158
Median	152
Lower Quartile	145
SCAT-V Mean	295
SCAT-V Standard Deviation	11

French Reading and Writing, Level L: High School Audio-Lingual Norms—Second Year

Reading					Writing				
Raw Score		Converted Score	Percentile Band	Mid-Percentile Rank	Raw Score		Converted Score	Percentile Band	Mid-Percentile Rank
Form LA	Form LB				Form LA	Form LB			
					98,99 - 100		184-185		
					94,95 - 96,97	99,100	182-183		
	50	180-181			90,91 - 92,93	95,96 - 97,98	180-181	98 -99.9	99
49 - 50	48 - 49	178-179			86,87 - 88,89	90,91,92 - 93,94	178-179	97 -99	98
47 - 48	46 - 47	176-177	97 -99.9	99.3	82,83 - 84,85	86,87 - 88,89	176-177	96 -98	97
45 - 46	45	174-175	95 -99.9	98	78,79 - 80,81	82,83 - 84,85	174-175	94 -97	96
43 - 44	43 - 44	172-173	92 -98	95	74,75 - 76,77	78,79 - 80,81	172-173	90 -96	94
41 - 42	41 - 42	170-171	88 -97	94	70,71 - 72,73	74,75 - 76,77	170-171	86 -94	90
39 - 40	39 - 40	168-169	83 -95	91	66,67 - 68,69	70,71 - 72,73	168-169	83 -90	86
37 - 38	37 - 38	166-167	80 -92	85	62,63 - 64,65	66,67 - 68,69	166-167	82 -86	83
35 - 36	35 - 36	164-165	76 -88	81	57,58,59 - 60,61	62,63 - 64,65	164-165	74 -83	82
33 - 34	33 - 34	162-163	73 -83	78	53,54 - 55,56	57,58 - 59,60,61	162-163	68 -82	74
31 - 32	31 - 32	160-161	68 -80	74	49,50 - 51,52	53,54 - 55,56	160-161	62 -74	68
29 - 30	29 - 30	158-159	61 -76	71	45,46 - 47,48	49,50 - 51,52	158-159	55 -68	62
27 - 28	27 - 28	156-157	57 -73	65	41,42 - 43,44	45,46 - 47,48	156-157	47 -62	55
25 - 26	25 - 26	154-155	49 -68	59	37,38 - 39,40	41,42 - 43,44	154-155	38 -55	47
23 - 24	23 - 24	152-153	41 -61	54	33,34 - 35,36	37,38 - 39,40	152-153	28 -47	38
21 - 22	22	150-151	33 -57	45	29,30 - 31,32	33,34 - 35,36	150-151	23 -38	28
19 - 20	20 - 21	148-149	28 -49	37	25,26 - 27,28	29,30 - 31,32	148-149	18 -28	23
17 - 18	18 - 19	146-147	17 -41	29	21,22 - 23,24	24,25 - 26,27,28	146-147	14 -23	18
15 - 16	16 - 17	144-145	11 -33	23	17,18 - 19,20	20,21 - 22,23	144-145	10 -18	14
13 - 14	14 - 15	142-143	7 -28	13	13,14 - 15,16	16,17 - 18,19	142-143	5 -14	10
11 - 12	12 - 13	140-141	4 -17	9	9,10 - 11,12	12,13 - 14,15	140-141	4 -10	5
9 - 10	10 - 11	138-139	3 -11	6	5,6 - 7,8	8,9 - 10,11	138-139	2 - 5	4
7 - 8	8 - 9	136-137	2 - 7	3	1,2 - 3,4	4,5 - 6,7	136-137	0.6- 4	2
6	6 - 7	134-135	2 - 4	2	0	0,1 - 2,3	134-135	0.1- 2	0.6
4 - 5	4 - 5	132-133	2 - 3	2					
2 - 3	2 - 3	130-131	0.1- 2	2					
0 - 1	0 - 1	128-129							

Number of Students	445	Number of Students	170
Number of Schools	30	Number of Schools	27
Mean	153	Mean	156
Standard Deviation	11	Standard Deviation	10
Upper Quartile	161	Upper Quartile	163
Median	151	Median	156
Lower Quartile	145	Lower Quartile	150
SCAT-V Mean	293	SCAT-V Mean	295
SCAT-V Standard Deviation	11	SCAT-V Standard Deviation	12

APPENDIX G

ORAL PROFICIENCY SCALE-- SPEAKING TEST II

LEVEL 1: Unable to function in the spoken language.
No oral production -- only a few isolated words.

LEVEL 2: Able to construct short phrases with difficulty and has many grammatical inaccuracies.
Speaks with much hesitation.

LEVEL 3: Shows spontaneity in language production, but fluency is uneven (speaks with some hesitation).
Limited vocabulary and grammar. Pronunciation is good.

LEVEL 4: Speaks with confidence in complete utterances with reasonably good grammatical accuracy.
Very good pronunciation. (This level is not to be compared to a native speaker).

APPENDIX H

KEY TO SITE DESCRIPTIONS

TYPE OF PROGRAM	NUMBER OF SCHOOLS	SCHOOL CODE NUMBERS
French FLES	3	FF1
		FF2
		FF3
French Immersion	2	FI1
		FI2
Spanish FLES	2	SF1
		SF2
Spanish Partial Immersion	5	SP1
		SP2
		SP3
		SP4
		SP5
Spanish Immersion	3	SI1
		SI2
		SI3

SCHOOL #FF1 - French FLES

SITE DESCRIPTION

I. TYPE OF PROGRAM - French FLES
Grades 4-8*

II. GOALS - The school brochure states that: "The purpose...is to provide a school of high academic standards and a Christian environment in which the child can develop his/her intellectual abilities and sense of individual responsibility." Foreign language (Spanish or French) is a part of the academic program.

III. METHODOLOGY - One of the French teachers incorporates some of the "Rassias" method, a technique developed at Dartmouth which focuses on drama and communication.

IV. CURRICULUM - The curriculum has been developed by the school over the years. The teachers coordinate with each other and try to prepare the students for high school French classes by using French textbooks as references.

V. COURSE SEQUENCE AND CONTACT HOURS - In grades 4 and 5, there is 30 minutes of instruction in French three times per week. French is taught for 40 minutes, 4 times per week in grade 6 and for 45 minutes daily in grades 7 and 8.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, and (3) cross-cultural understanding.

VII. ARTICULATION - Most of the students continue on to French 2 (or French 3, in rare cases) in high school.

*Even though instruction in French does not currently begin until grade 4, the students tested in the study did receive French instruction in the lower elementary grades. Spanish is now taught in grades 1-8, with French as an option in grades 4-8. In addition, Latin is offered in grades 7 and 8.

SCHOOL FF1: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 4-6 YEARS OF FRENCH

	Total Students	Sex		Grade		Age			Years of Foreign Language		
		M	F	6	7	11	12	13	4	5	6
Frequency	16	8	8	12	4	7	7	2	1	7	8
Percent	100	50	50	75	25	44	44	12	6	44	50

SCHOOL #FF2 - French FLES

SITE DESCRIPTION

I. TYPE OF PROGRAM - French FLES
Grades K-8

II. GOALS - The goal of the program is for the students to develop "a basic understanding of vocabulary, pronunciation, and conversation."

III. METHODOLOGY - The aural/oral FLES approach is used at this school. Emphasis is on simple conversations, vocabulary drills, and exercises. A language laboratory is used to listen to taped drills so students can learn by repeating phrases and conversations.

IV. CURRICULUM - The curriculum was developed by the language teachers.

V. COURSE SEQUENCE AND CONTACT HOURS - Kindergarten and grade 1 have 15 minutes a day of French or Spanish, grade 2 has 20-25 minutes, grades 3 and 4 have 30 minutes, and grades 5-8 have 45 minutes a day.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening and (2) speaking, for all grades; (3) reading and (4) writing, for grades 4-8; and (5) a general emphasis on cross-cultural understanding for all grades.

VII. ARTICULATION - The students study foreign language for 8 years at this school. There is now a proposal being discussed to allow these students to continue foreign language study at a designated high school that would be a foreign language "magnet" school.

SCHOOL FF2: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 4-6 YEARS OF FRENCH

	Total Students	Sex		Grade			Age				Years of Foreign Language		
		M	F	6	7	8	12	13	14	15	4	5	6
Frequency	7	3	4	1	1	5	1	2	3	1	3	2	2
Percent	100	43	57	14	14	72	14	29	43	14	42	29	29

SCHOOL #FF3 - French FLES

SITE DESCRIPTION

I. TYPE OF PROGRAM - French FLES
Grades K-8

II. GOALS - The goal of the program is for the students to "develop the ability to understand, speak, read, and write French accurately and fluently."

III. METHODOLOGY - The methodology is based on the stages of the language skill learning process, which are "aural understanding, oral production (control of the pronunciation), reading skill development, writing skill, and mastery of grammatical facts and rules involved in the sentence patterns of the language."

IV. CURRICULUM - For primary grades, the teacher-developed curriculum (from 1926) emphasizes conversation. Basic vocabulary and simple dialogue form the basis of this program. Both the primary and intermediate grades' French classes focus on "developing a working French oral repertoire," accomplished through the use of skills "fundamental to language learning (memorization, recall, intonation, cadence, and pronunciation)." Grades 4-8 use the textbook and workbook Son et Sens, which require a greater emphasis on reading and writing.

V. COURSE SEQUENCE AND CONTACT HOURS - There are approximately 30-40 minutes per day allotted to instruction in French. In addition, a two-track system (average and accelerated) is used in the junior high grades.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) reading, (4) writing, and (5) cross-cultural understanding.

VII. ARTICULATION - Most of the students attend private Catholic high schools in the area, where they enroll in second year French classes.

SCHOOL FF3: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 4-6 YEARS OF FRENCH

	Total Students	Sex		Grade					Age						Years of Foreign Language		
		M	F	4	5	6	7	8	9	10	11	12	13	14	4	5	6
Frequency	60	27	33	25	20	3	8	4	10	22	13	7	7	1	7	38	15
Percent	100	45	55	42	33	5	13	7	17	37	22	11	11	2	12	63	25

SCHOOL #FI1 - French Immersion

SITE DESCRIPTION

I. TYPE OF PROGRAM - French immersion
Grades K-5

II. GOALS - The French immersion students who complete the K-5 sequence should be able to: (1) communicate fluently (understand, speak, read, and write) in the foreign language with ability to function in the language in the classroom and everyday life; (2) perform in English language arts and on a district-wide reading test as well or better than their monolingual peers; (3) acquire an understanding, knowledge, and appreciation of other cultures; (4) achieve proficiency in the foreign language and English so that they are able to continue their studies in both languages; and (5) achieve skills and knowledge in all subject areas equal to or greater than their monolingual peers, as measured by the district's standardized tests.

III. METHODOLOGY - The methodology used in this program is the "immersion methodology": the foreign language is used to teach regular subjects.

IV. CURRICULUM - The curriculum is the regular school district's curriculum adapted for use in the French classroom.

V. COURSE SEQUENCE AND CONTACT HOURS - The kindergarteners and first graders receive all instruction in the foreign language. The second graders spend 30-45 minutes a day (approximately 10% of day) in English reading and language arts. The third graders spend 45-60 minutes a day in English reading and language arts. The fourth graders spend 1-1/2 days a week in English. The fifth graders receive approximately 50% of their instruction in English.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) reading, (4) writing, and (5) cross-cultural understanding.

VII. ARTICULATION - The immersion students continue on to the middle school (grades 7 and 8) and high school where they are offered at least 2 courses in the foreign language (a language arts course and a content area course, e.g., social studies or American history).

SCHOOL FI1: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 4-6 YEARS OF FRENCH

	Total Students	Sex		Grade		Age			Years of Foreign Language		
		M	F	4	5	9	10	11	4	5	6
Frequency	17	7	10	11	6	4	10	3		1	16
Percent	100	41	59	65	35	23	59	18		6	94

SCHOOL #FI2 - French Immersion -76-

SITE DESCRIPTION

I. TYPE OF PROGRAM - French immersion
Grades 1-6

II. GOALS - The French immersion students who complete the grades 1-6 sequence are expected to complete the regular curriculum as well as become "functionally fluent" in French. This means that the sixth graders should be able to communicate on topics appropriate to their age almost as well as 11-year-olds in the foreign country.

III. METHODOLOGY - The methodology used in this program is the "immersion methodology": the foreign language is used to teach regular subjects.

IV. CURRICULUM - The curriculum is the school district's regular curriculum adapted for use in the French classroom.

V. COURSE SEQUENCE AND CONTACT HOURS - The first, second, and third graders receive all instruction in the foreign language. English language arts is introduced in fourth grade, and by sixth grade 50% of classes are taught in English and 50% in French. Supplementary classes such as music, band, drama, and library are all taught in English.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) reading, (4) writing, and (5) cross-cultural understanding.

VII. ARTICULATION - The immersion students continue on to the junior high (grades 7 and 8) where they are offered two courses in French: World Studies and a French language class.

SCHOOL FI2: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 4-6 YEARS OF FRENCH

	Total Students	Sex		Grade		Age			Years of Foreign Language		
		M	F	5	6	10	11	12	4	5	6
Frequency	16	4	12	5	11	5	7	4	3	5	8
Percent	100	25	75	31	69	31	44	25	19	31	50

SCHOOL #SF1 - Spanish FLES

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish FLES
Grades K-8

II. GOALS - The goal of the program is for the students to develop proficiency in the foreign language.

III. METHODOLOGY - The method used by the upper-grade Spanish teacher sounds similar to grammar-translation, e.g., with emphasis on grammatical concepts and Spanish-English translation exercises.

IV. CURRICULUM - The curriculum has been developed over the years by the school. Teacher turn-over, however, has made consistent curriculum development difficult.

V. COURSE SEQUENCE AND CONTACT HOURS - In grades K-4, 20-25 minutes of Spanish are added to the regular classes, with the Spanish teacher rotating from class to class. Courses are departmentalized in the upper grades; Spanish class meets 4 hours/week in grades 5-7 and 2 hours/week in grade 8.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) reading, (2) listening, (3) speaking, and (4) writing. Cross-cultural understanding is integrated into the other four skill areas.

VII. ARTICULATION - The students usually enroll in Spanish 2 when they move on the local high school.

SCHOOL SF1: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade				Age					Years of Foreign Language		
		M	F	5	6	7	8	10	11	12	13	14	5	6	7
Frequency	15	11	4	5	5	4	1	2	4	5	3	1	9	4	2
Percent	100	73	27	33	33	27	7	13	27	33	20	7	60	27	13

SCHOOL #SF2 - Spanish FLES

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish FLES
Grades K-8

II. GOALS - The goal of the program is for the students to develop "a basic understanding of vocabulary, pronunciation, and conversation."

III. METHODOLOGY - The aural/oral FLES approach is used at this school. Emphasis is on simple conversations, vocabulary drills, and exercises. A language laboratory is used to listen to taped drills so students can learn by repeating phrases and conversations.

IV. CURRICULUM - The curriculum was developed by the language teachers.

V. COURSE SEQUENCE AND CONTACT HOURS - Kindergarten and grade 1 have 15 minutes a day of French or Spanish, grade 2 has 20-25 minutes, grades 3 and 4 have 30 minutes, and grades 5-8 have 45 minutes a day.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening and (2) speaking, for all grades; (3) reading and (4) writing, for grades 4-8; and (5) a general emphasis on cross-cultural understanding for all grades.

VII. ARTICULATION - The students study foreign language for 8 years at this school. There is now a proposal being discussed to allow these students to continue foreign language study at a designated high school that would be a foreign language "magnet" school.

SCHOOL SF2: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade			Age			Years of Foreign Language		
		M	F	6	7	8	12	13	14	5	6	7
Frequency	7	6	1	2	2	3	2	3	2	2	3	2
Percent	100	86	14	29	29	42	29	42	29	29	42	29

SCHOOL #SP1 - Spanish Partial Immersion

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish partial immersion
Grades 6-8

II. GOALS - The goal of the program is for the students to develop proficiency in the foreign language.

III. METHODOLOGY - A semantically-based syllabus is used for this class taught entirely in Spanish.

IV. CURRICULUM - The curriculum was developed by the school district.

V. COURSE SEQUENCE AND CONTACT HOURS - This middle school articulation class is 1-1/2 periods of Spanish language a day. The class is conducted entirely in Spanish.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) cross-cultural understanding, (4) reading, and (5) writing.

VII. ARTICULATION - The partial immersion students who have attended 3 different types of programs in 4 elementary schools in the city all attend this middle school. In high school they have the option of entering an international studies high school program that offers courses in law, economics, comparative literature, language, art, and music, all with an international orientation.

SCHOOL SP1: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade	Age			Years of Foreign Language		
		M	F	6	10	11	12	5	6	7
Frequency	45	21	24	45	11	33	1	22	20	3
Percent	100	47	53	100	25	73	2	49	44	7

SCHOOL #SP2 - Spanish Partial Immersion

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish partial immersion
Grades K-5

II. GOALS - The goal of the program is for the students to develop proficiency in the foreign language.

III. METHODOLOGY - A semantically-based syllabus is used for this language class taught entirely in Spanish. Approximately 15-20 minutes a day of Spanish reading and writing are taught in grades 4 and 5.

IV. CURRICULUM - The curriculum was developed by the school district.

V. COURSE SEQUENCE AND CONTACT HOURS - Students have 70 minutes a day of Spanish language class. The class is conducted entirely in Spanish.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) cross-cultural understanding, (4) reading, and (5) writing.

VII. ARTICULATION - Students continue language study in the middle school (grades 6-8) where they receive 70 minutes of language instruction per day. In high school they have the option of entering an international studies program that offers courses in law, economics, comparative literature, language, art, and music, all with an internation orientation.

SCHOOL SP2: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade	Age			Years of Foreign Language		
		M	F	5	10	11	12	5	6	7
Frequency	16	6	10	16	4	10	2	7	8	1
Percent	100	37	63	100	25	63	12	44	50	6

SCHOOL #SP3 - Spanish Partial Immersion

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish partial immersion
Grades K-5

II. GOALS - The goal of the program is for the students to develop proficiency in the foreign language.

III. METHODOLOGY - A semantically based syllabus is used for the language class. The two content area classes taught in the foreign language follow the immersion methodology.

IV. CURRICULUM - The curriculum was developed by the school district.

V. COURSE SEQUENCE AND CONTACT HOURS - Students have 70 minutes a day of Spanish language class, conducted entirely in Spanish. Additionally, students in grades 3, 4, and 5 have immersion classes for 2 subjects: either social studies and health or science and math are taught in Spanish.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) cross-cultural understanding, (4) reading, and (5) writing.

VII. ARTICULATION - Students continue language study in the middle school (grades 6-8) where they receive 70 minutes of language instruction per day. In high school they have the option of entering an international studies program that offers courses in law, economics, comparative literature, language, art, and music, all with an international orientation.

SCHOOL SP3: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade	Age		Years of Foreign Language	
		M	F	5	10	11	5	6
Frequency	14	8	6	14	5	9	3	11
Percent	100	57	43	100	36	64	21	79

SCHOOL #SP4 - Spanish Partial Immersion -82-

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish partial immersion
Grades K-5

II. GOALS - The goal of the program is for the students to develop proficiency in the foreign language.

III. METHODOLOGY - The methodology used in this program for half the classes is the "immersion methodology": the foreign language is used to teach regular subjects.

IV. CURRICULUM - The curriculum was developed by the school district.

V. COURSE SEQUENCE AND CONTACT HOURS - Approximately 1/2 of the day's classes are taught in the foreign language. This is only the second year that these students have had half-day immersion. Up until last year they received only 70 minutes of Spanish class daily.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) cross-cultural understanding, (4) reading, and (5) writing.

VII. ARTICULATION - Students continue language study in the middle school (grades 6-8) where they receive 70 minutes of language instruction per day. In high school they have the option of entering an international studies program that offers courses in law, economics, comparative literature, language, art, and music, all with an internation orientation.

SCHOOL SP4: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade	Age			Years of Foreign Language	
		M	F	5	10	11	12	5	6
Frequency	11	5	6	11	4	6	1	1	10
Percent	100	45	55	100	36	55	9	9	91

SCHOOL #SP5 - Spanish Partial Immersion -83-

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish partial immersion
Grades K-5

II. GOALS - The goal of the program is for the students to develop proficiency in the foreign language.

III. METHODOLOGY - A semantically-based syllabus is used for this language class taught entirely in Spanish. Approximately 15-20 minutes a day of Spanish reading and writing are taught in grades 4 and 5.

IV. CURRICULUM - The curriculum was developed by the school district.

V. COURSE SEQUENCE AND CONTACT HOURS - Students have 70 minutes a day of Spanish language class. The class is conducted entirely in Spanish.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) cross-cultural understanding, (4) reading, and (5) writing.

VII. ARTICULATION - Students continue language study in the middle school (grades 6-8) where they receive 70 minutes of language instruction per day. In high school they have the option of entering an international studies program that offers courses in law, economics, comparative literature, language, art, and music, all with an internation orientation.

SCHOOL SP5: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade	Age			Years of Foreign Language	
		M	F	5	10	11	12	5	6
Frequency	12	5	7	12	5	6	1	8	4
Percent	100	42	58	100	42	50	8	67	33

SCHOOL #SI1 - Spanish Immersion

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish immersion
Grades K-6

II. GOALS - The following predictions were made at the onset of the program: (1) The children will acquire native-like proficiency in speaking, understanding, reading, and writing Spanish; (2) they will make normal progress in achieving the standard objectives of the elementary school curriculum; (3) they will maintain normal progress in the maturation process of their first language; and (4) they will develop positive attitudes toward representatives of the Spanish-speaking community while maintaining a positive self-image as representatives of the English-speaking community.

III. METHODOLOGY - The methodology used in this program is the "immersion methodology": the foreign language is used to teach regular subjects.

IV. CURRICULUM - The curriculum is the regular school district's curriculum adapted for use in the immersion classroom. In addition, the teachers have added to the curriculum by adapting some of the curriculum developed for the Spanish/English bilingual programs in the district.

V. COURSE SEQUENCE AND CONTACT HOURS - In kindergarten and grade 1 all instruction is in the foreign language. In grades 2 and 3 one hour of English language arts/reading is offered. The amount of English instruction is increased in grades 4-6, so that approximately 40% of the school day is spent in English and 60% in Spanish.

VI. SKILLS EMPHASIS - The program ranks the language skills in the followng order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) cross-cultural understanding, (4) reading, and (5) writing.

VII. ARTICULATION - Starting in the academic year 1983-84, the middle school will contain grades 5-8. The immersion program will remain unchanged in grades 5 and 6 and will now extend through grade 8. At the present time there are no plans to extend the program into the high school as well. Students wishing to continue Spanish in high school take the Spanish as a foreign language courses that are offered to all high school students.

SCHOOL SI1: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade		Age			Years of Foreign Language		
		M	F	5	6	10	11	12	5	6	7
Frequency	39	18	21	19	20	11	19	9	1	21	17
Percent	100	46	54	49	51	28	49	23	2	54	44

SCHOOL #SI2 - Spanish Immersion -85-

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish immersion
Grades K-6

II. GOALS - Students who complete the K-6 immersion sequence should be "functionally fluent" in the foreign language, enabling them to function in a Spanish-speaking country almost as well as a 6th grader in that country.

III. METHODOLOGY - The methodology used in this program is the "immersion methodology": the foreign language is used to teach the regular subjects.

IV. CURRICULUM - An immersion curriculum was developed by both the classroom and resource teachers. The resource teachers assist the classroom teachers with materials development and in-service training.

V. COURSE SEQUENCE AND CONTACT HOURS - Students in grades K-2 receive all their instruction in Spanish. Students in grades 3-6 receive one hour of instruction in English; the ratio of Spanish to English is 80% to 20%.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following order of importance for their program, from most to least important: (1) listening, (2) speaking, (3) reading, (4) writing, and (5) cross-cultural understanding.

VII. ARTICULATION - There are follow-up immersion programs available in both junior high school and high school.

SCHOOL SI2: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade		Age			Years of Foreign Language	
		M	F	5	6	10	11	12	5	6
Frequency	55	20	35	30	25	13	26	16	13	42
Percent	100	36	64	55	45	24	47	29	24	76

SCHOOL #SI3 - Spanish Immersion

SITE DESCRIPTION

I. TYPE OF PROGRAM - Spanish immersion
Grades 7-9

II. GOALS - "The program is dedicated to the concept that students who speak two languages are better prepared to take advantage of the academic and business world. Students become fluent in Spanish while achieving at grade level or above in the subject content areas."

III. METHODOLOGY - The methodology used in this program is the "immersion methodology": the foreign language is used to teach regular subjects.

IV. CURRICULUM - The curriculum at the junior high level was developed by the program coordinator and the classroom teachers with special attention to coordinating it with the elementary immersion curriculum.

V. COURSE SEQUENCE AND CONTACT HOURS - Students in grades 7-9 take Physical Education, "formal" Spanish, and Mathematics in Spanish. In addition, 7th graders take Social Studies in Spanish, 8th graders take United States History in Spanish, and 9th graders take World Geography in Spanish. Elective courses in Music, Art, Science, and Consumer and Family Studies are offered in Spanish.

VI. SKILLS EMPHASIS - The program ranks the language skills in the following areas of importance for their program, from most to least important: (1) listening, (2) cross-cultural understanding, (3) speaking, (4) reading, and (5) writing.

VII. ARTICULATION - The immersion program continues on in the high school (grades 10-12). In grade 10, students will enroll in a two-hour block of immersion in Spanish language arts consisting of Spanish and Biology. In grade 11, the two immersion classes are Spanish and United States History. Twelfth-grade students take Spanish and American Government. Additional courses in Spanish may be elected in Mathematics and Social Studies.

SCHOOL SI3: UNIVARIATE FREQUENCIES FOR STUDENTS WHO HAD HAD 5-7 YEARS OF SPANISH

	Total Students	Sex		Grade			Age				Years of Foreign Language		
		M	F	7	8	9	12	13	14	15	5	6	7
Frequency	52	16	36	25	8	19	13	17	15	7	8	42	2
Percent	100	31	69	48	15	37	25	33	29	13	15	81	4

Spanish Listening and Speaking, Level L: High School Audio-Lingual Norms—Second Year

Listening					Speaking				
Raw Score		Converted Score	Percentile Band	Mid-Percentile Rank	Raw Score		Converted Score	Percentile Band	Mid-Percentile Rank
Form LA	Form LB				Form LA	Form LB			
	45	186-187							
	44	184-185			81 - 82		214-215		
44 - 45	42 - 43	182-183			79 - 80	82	212-213		
42 - 43	41	180-181	96 -99.9	97	78	80 - 81	210-211		
41	39 - 40	178-179	94 -99.9	(96)	76 - 77	79	208-209		
39 - 40	38	176-177	94 -97	96	74 - 75	77 - 78	206-207		
37 - 38	37	174-175	92 -96	94	73	76	204-205		
36	35 - 36	172-173	90 -96	94	71 - 72	74 - 75	202-203		
34 - 35	34	170-171	88 -94	92	69 - 70	73	200-201		
33	32 - 33	168-169	85 -94	90	67 - 68	71 - 72	198-199		
31 - 32	31	166-167	82 -92	88	66	69 - 70	196-197		
29 - 30	29 - 30	164-165	76 -90	85	64 - 65	68	194-195		
28	28	162-163	72 -88	82	62 - 63	66 - 67	192-193		
26 - 27	26 - 27	160-161	70 -85	76	61	65	190-191		
24 - 25	25	158-159	62 -82	72	59 - 60	63 - 64	188-189		
23	24	156-157	52 -76	70	57 - 58	62	186-187		
21 - 22	22 - 23	154-155	46 -72	62	55 - 56	60 - 61	184-185		
20	21	152-153	36 -70	52	54	58 - 59	182-183		
18 - 19	19 - 20	150-151	35 -62	46	52 - 53	57	180-181		
16 - 17	18	148-149	22 -52	36	50 - 51	55 - 56	178-179		
15	16 - 17	146-147	12 -46	35	49	54	176-177	96 -99.9	98
13 - 14	15	144-145	7 -36	22	47 - 48	52 - 53	174-175	95 -99.9	97
12	14	142-143	2 -35	12	45 - 46	51	172-173	95 -98	96
10 - 11	12 - 13	140-141	0.8-22	7	43 - 44	49 - 50	170-171	89 -97	95
8 - 9	11	138-139	0.8-12	2	42	47 - 48	168-169	84 -96	95
7	9 - 10	136-137	0.1- 7	0.8	40 - 41	46	166-167	79 -95	89
5 - 6	8	134-135	0.1- 2	0.8	38 - 39	44 - 45	164-165	76 -95	84
3 - 4	6 - 7	132-133			37	43	162-163	71 -89	79
2	5	130-131			35 - 36	41 - 42	160-161	62 -84	76
0 - 1	3 - 4	128-129			33 - 34	40	158-159	62 -79	71
	2	126-127			31 - 32	38 - 39	156-157	54 -76	62
	1	124-125			30	36 - 37	154-155	45 -71	62
	0	122-123			28 - 29	35	152-153	37 -62	54
					26 - 27	33 - 34	150-151	35 -62	45
					25	32	148-149	26 -54	37
					23 - 24	30 - 31	146-147	19 -45	35
					21 - 22	29	144-145	19 -37	26
					19 - 20	27 - 28	142-143	14 -35	19
					18	25 - 26	140-141	6 -26	19
					16 - 17	24	138-139	4 -19	14
					14 - 15	22 - 23	136-137	4 -19	6
					13	21	134-135	1 -14	4
					11 - 12	19 - 20	132-133	0.1- 6	4
					9 - 10	18	130-131	0.1- 4	1
					7 - 8	16 - 17	128-129		
					6	14 - 15	126-127		
					4 - 5	13	124-125		
					2 - 3	11 - 12	122-123		
					1	10	120-121		
					0	8 - 9	118-119		
						7	116-117		
						5 - 6	114-115		
						3 - 4	112-113		
						2	110-111		
						0 - 1	108-109		

Number of Students	534	Number of Students	95
Number of Schools	24	Number of Schools	5
Mean	153	Mean	152
Standard Deviation	11	Standard Deviation	11
Upper Quartile	160	Upper Quartile	161
Median	151	Median	151
Lower Quartile	145	Lower Quartile	144
SCAT-V Mean	291	SCAT-V Mean	291
SCAT-V Standard Deviation	11	SCAT-V Standard Deviation	12

1963 Norms

Spanish Reading and Writing, Level L: High School Audio-Lingual Norms—Second Year

Reading

Raw Score Form LA	Raw Score Form LB	Converted Score	Percentile Band	Mid-Percentile Rank
		184-185		
49 - 50	49 - 50	182-183	97 -99.9	99.7
47 - 48	47 - 48	180-181	95 -99.9	98
46	46	178-179	94 -99.7	97
44 - 45	44 - 45	176-177	92 -98	95
42 - 43	42 - 43	174-175	90 -97	94
40 - 41	40 - 41	172-173	89 -95	92
39	38 - 39	170-171	86 -94	90
37 - 38	37	168-169	85 -92	89
35 - 36	35 - 36	166-167	82 -90	86
33 - 34	33 - 34	164-165	77 -89	85
32	31 - 32	162-163	71 -86	82
30 - 31	30	160-161	65 -85	77
28 - 29	28 - 29	158-159	59 -82	71
27	26 - 27	156-157	53 -77	65
25 - 26	24 - 25	154-155	48 -71	59
23 - 24	23	152-153	37 -65	53
21 - 22	21 - 22	150-151	31 -59	48
20	19 - 20	148-149	19 -53	37
18 - 19	17 - 18	146-147	15 -48	31
16 - 17	16	144-145	10 -37	19
14 - 15	14 - 15	142-143	6 -31	15
13	12 - 13	140-141	4 -19	10
11 - 12	10 - 11	138-139	4 -15	6
9 - 10	9	136-137	4 -10	4
8	7 - 8	134-135	2 - 6	4
6 - 7	5 - 6	132-133	2 - 4	4
4 - 5	3 - 4	130-131	0.1- 4	2
2 - 3	2	128-129	0.1- 4	2
1	0 - 1	126-127		
0				

Number of Students	323
Number of Schools	24
Mean	153
Standard Deviation	11
Upper Quartile	159
Median	152
Lower Quartile	146
SCAT-V Mean	291
SCAT-V Standard Deviation	11

Writing

Raw Score Form LA	Raw Score Form LB	Converted Score	Percentile Band	Mid-Percentile Rank
100	97,98,99 - 100	176-177		
95,96,97 - 98,99	93,94 - 95,96	174-175		
90,91,92 - 93,94	88,89 - 90,91,92	172-173	97 -99.9	97
86,87 - 88,89	83,84,85 - 86,87	170-171	95 -97	97
81,82 - 83,84,85	79,80 - 81,82	168-169	91 -97	95
76,77 - 78,79,80	74,75 - 76,77,78	166-167	88 -95	91
71,72 - 73,74,75	69,70,71 - 72,73	164-165	80 -91	88
66,67 - 68,69,70	65,66 - 67,68	162-163	72 -88	80
61,62 - 63,64,65	60,61 - 62,63,64	160-161	69 -80	72
56,57,58 - 59,60	56,57 - 58,59	158-159	63 -72	69
51,52,53 - 54,55	51,52 - 53,54,55	156-157	57 -69	63
46,47,48 - 49,50	46,47,48 - 49,50	154-155	51 -63	57
41,42,43 - 44,45	42,43 - 44,45	152-153	42 -57	51
36,37,38 - 39,40	37,38 - 39,40,41	150-151	39 -51	42
32,33 - 34,35	32,33,34 - 35,36	148-149	32 -42	39
27,28 - 29,30,31	28,29 - 30,31	146-147	24 -39	32
22,23 - 24,25,26	23,24 - 25,26,27	144-145	17 -32	24
17,18 - 19,20,21	18,19,20 - 21,22	142-143	13 -24	17
12,13 - 14,15,16	14,15 - 16,17	140-141	7 -17	13
7,8 - 9,10,11	9,10,11 - 12,13	138-139	4 -13	7
2,3,4 - 5,6	5,6 - 7,8	136-137	0.7- 7	4
0,1	0,1 - 2,3,4	134-135	0.1- 4	0.7

Number of Students	150
Number of Schools	21
Mean	153
Standard Deviation	10
Upper Quartile	162
Median	152
Lower Quartile	146
SCAT-V Mean	291
SCAT-V Standard Deviation	13